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ABSTRACT

Project Advance is a cooperative program between Syracuse University and New York State school districts. Selected courses, developed and implemented in the university by cooperating academic departments and the Center for Instructional Development, are piloted on campus and then offered for both high school and university credit in participating high schools as part of their regular school programs. Students are charged a modest overhead fee for the course and receive regular Syracuse University credit, which is widely transferable to other colleges and universities throughout the country. The courses are part of the regular teaching load of the high school teachers, who attend special university training workshops and seminars and teach the course under the supervision of university faculty. The grading standards for the course are identical both on and off campus. The project has expanded since its implementation in 1973 from 400 to 3,400 students in 58 schools. Conclusions are presented regarding: description of students; project helpfulness in college admissions; transfer of academic credit; academic achievement prediction; student expectations of college; enrollment and distribution of grades; and priorities of students, parents, and school personnel. (LBH)

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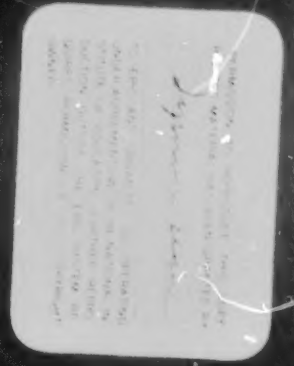

PROJECT ADVANCE EVALUATION
SERIES B 1974-75

David Chapman, et al.

Report 10

CENTER FOR INSTRUCTIONAL DEVELOPMENT, SYRACUSE UNIVERSITY

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Project Advance is a cooperative program between Syracuse University and New York State school districts. Selected courses, developed and implemented in the University by cooperating academic departments and the Center for Instructional Development, are piloted on campus and then offered for both high school and university credit in participating high schools as part of their regular school programs. Students are charged a modest overhead fee for the course and receive regular Syracuse University credit which is widely transferable to other colleges and universities throughout the country.

The courses are part of the regular teaching load of the high school teachers, who attend special university training workshops and seminars and teach the course under the supervision of university faculty. The grading standards for the course are identical both on and off campus.

Developed to meet a variety of needs expressed by high school superintendents, the project was first implemented during the 1973-74 academic year in six school districts. Over 400 students were enrolled in four of the five courses that were available. By the fall of 1975 the project had expanded to 58 schools from Long Island to Buffalo and had an enrollment of over 3400 students.

This report is one of a series on the project. A detailed description of Project Advance, its design, organization, and operation will be found in Research Report Number 3 published by the Center for Instructional Development. The evaluation of Project Advance for 1973-74 is presented in Research Report Number 4.

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SUMMARY OF CONCLUSIONS

Project Advance Students, 1974-75: A Description of Students Based on the Student Descriptive Questionnaire

David Chapman

Overall, the 226 students involved in this study reported a higher grade average and rank in class and SAT scores than did other college bound students in New York or the United States who also completed Student Descriptive Questionnaires. As a group, respondents in Project Advance courses have higher educational aspirations than do college bound students generally. As a group, Project Advance students in this study were more active in high school clubs and organizations, extracurricular activities, and community and ch[illegible]roups than were college bound students generally. Proportionately, more Project Advance respondents received high school honors and awards than other college bound students. The average estimated parental income of Project Advance student respondents was $22,410. For college bound student respondents generally, it was $18,952.

College Credit During High School: Does It Help in College Admissions

David Chapman, Suzanne Rice and Olcott Gardner

The results of this study indicate that students receiving college credit through Project Advance had about the same probability of acceptance to the college of their choice as students who did not participate in the program when those groups were matched on the basis of academic aptitude and achievement factors using the College Acceptance Profile.

A Follow-Up Study of the Transfer of Academic Credit Earned by 1973-74 SUPA Students

Franklin Wilbur

The major findings of this study were the following:

1. The majority of participating institutions indicated that they have <u>not</u> yet developed written policy related to the transfer of college credit earned by students while they were still enrolled in high school. This is confirmed by student data.

2. Marked differences in the primary location of decision making authority related to the evaluation of transfer credit was observed among institutions of different types, kinds, and sizes.
3. The majority of institutional and student returns indicated that a student's choice of major or area of concentration would not affect the recognition of SUPA transfer credit regardless of the type, kind, and size of institution. It was found, however, that choice of major was more likely to be a factor at public institutions and at larger institutions, particularly universities.
4. Returns from institutions indicate that students are usually notified of transfer credit decisions before campus registration but after official acceptance. Some variation in such a practice was observed when institutional data were sorted by type, kind, and size, particularly among private colleges and universities.
5. Successful completion of SUPA courses was generally recognized both for fulfilling requirements in a student's academic program and as credit toward the associate or baccalaureate degrees. There was general agreement between students and institutions as to the treatment of the credit. In addition, institutions were nearly always internally consistent in their evaluation of SUPA transcripts among students and within courses.

Does Participation in a Project Advance Course Affect a Student's Ability to Do Well in College? A Follow-Up of 1973-74 Project Advance Students

David Chapman

Students who successfully completed Project Advance courses in high school duing 1973-74 were contacted by mail and asked to complete a questionnaire regarding their experiences in college and the influence of Project Advance on those experiences.

The 100 Project Advance students responding to this questionnaire averaged a 3.0 (B average) at the end of their sophomore year. Slightly over half of the students felt their experience in a Project Advance course helped them learn to manage their time and develop good study habits. Their overall rating of their Project Advance course(s) was overwhelmingly positive. The vast majority of the students would still recommend both the course(s) they took and their

teacher(s). About 20 percent of the students expected that as a result of their participation in a Project Advance course they might complete their degree program sooner.

Project Advance Students' Expectations of College: A Comparison of Project Advance Students Coming to Syracuse University with Other Syracuse University Freshmen Using the College Characteristics Index

Bonnie Baranowski and David Chapman

Do students who take college courses during high school hold more accurate expectations of college than other college-bound students? This study used the College Characteristics Index (CCI) to investigate, first, whether the college expectations of students taking Project Advance courses and then coming to Syracuse University as freshmen differed from those of other freshmen entering Syracuse University and, secondly, whether that difference was in the direction of more realistic expectations on the part of the Project Advance group.

Results indicated that, overall, entering freshmen had unrealistic and idealized expectations of college life, consistent with what Stern (1970) has described as the "freshman myth." However, students who had taken college courses during high school through Project Advance differed significantly from the other entering freshmen and appeared closer to upperclassmen in their expectations of academic and intellectual aspects of college.

The Enrollment and Distribution of Grades and College Credits Earned by Project Advance Students, 1974-75

Richard Holloway

During 1974-75, 1865 students were enrolled in Project Advance courses in 54 high schools across New York State. This was a substantial increase over 1973-74 in which 462 students from 9 high schools were enrolled. The distribution of grades by school during 1974-75 indicates a high degree of consistency in grading patterns within courses across schools.

The Priorities of Students, Parents, and School Personnel for Project Advance and Their Expectations of Project Advance Courses

David Chapman

This study investigated the priorities of students, parents, teachers and principals among thirty possible outcomes for Project Advance. Results indicated that these four groups have a high level of agreement in their ordering of goals for Project Advance. The study also indicates that students and parents may have shifted from seeing the Project as an experiment as indicated in the first year's evaluation to seeing the Project as an "investment" with more attention to the payoff, i.e., college credit and preparation for a successful college experience.

Secondly, this study investigated the expectations of students, parents, and school people toward courses in Project Advance. All three groups began the year with rather high expectations for an interesting and worthwhile experience of moderate difficulty and minimal dullness. At a more inferential level of analysis, some significant differences are observed among groups.

Equivalency of Project Advance Freshman English

a. A Comparison of Freshman English Essays Written by Project Advance Students and Syracuse University Students, 1974-75

b. Student Ratings of Project Advance Freshman English

David Chapman

The evaluation of Project Advance Freshman English compared the quality of student writing between Project Advance and Syracuse University Freshman English courses and described the characteristics of passing and failing papers from these two sources. Secondly, it examined student ratings of the Project Advance course and compared the rating of students who differed in the amount of credit they earned and those who differed in the grades they received.

The results of the writing comparison indicate that papers written by Project Advance students at both Level II (Compsoition) and Level III (Literature) met the standards applied to passing papers in Freshman English at Syracuse University. At Level II, Project Advance papers, both passing and failing, were better than the corresponding papers written by Syracuse University students. Level III Project Advance failing papers were better than the failing papers

on-campus.

Overall, student ratings of Project Advance English were positive. However, within that positive range, students more often rated the course "good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale, though the top two categories were collapsed for easier reading. Few large differences were observed between pre-course expectations and post-course ratings. However, for the most part, where these shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be. Students who differed in the amount of college credit they earned did not differ much in their overall ratings of the course. However, marked differences appeared between students who differed in the average grade they received (A's or C's). Both groups felt they had learned from the course, but students who averaged "C's" found it a much less positive experience and were less likely to recommend it to their friends.

Evaluation of Project Advance Psychology

a. The Equivalency of Student Performance Between Project Advance and Syracuse University

b. Student Ratings of Project Advance Psychology

David Chapman

The evaluation of Project Advance Psychology compared the performance of students in Project Advance with that of students taking the same course at Syracuse University at ten points through the course--a pre- and post-test, a midterm, and each of seven required modules.

Secondly, the evaluation study examined Project Advance students' ratings of the course and considered how students who differed in their grades in the course differed in their ratings of the course.

The results indicate that students taking Psychology 205 through Project Advance and students taking the same course at Syracuse University were nearly equal in their performance as measured by their test scores at ten points. Moreover, student performance from school to school across Project Advance was quite consistent.

Overall, student ratings of Project Advance Psychology were overwhelmingly positive. Within that positive range, students more often rated the course

"good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale. Across high schools, students were quite consistent in their ratings. However, where shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be. Students who differed in the grades they earned differed only slightly in their ratings of the course. Both groups found the course to be a positive experience, but "C" students found the readings more difficult and the work load to be heavier than did the "A" students.

An Assessment of the Readability of Text Material in Project Advance Psychology

Tess Koseff

Since the text materials were found to range in difficulty from eleventh grade to sixteenth grade and above, high school students who are experiencing difficulty in reading high school texts should not be recommended for this survey course in psychology. Difficulty in reading might be reflected by standardized test scores, school achievement and teacher observations, especially in areas such as English and Social Studies.

Motivation is acknowledged to play an important role in reading comprehension. According to reading research, students comprehend more when they have established a purpose for reading, a set to learn, as well as an interest in the subject. Since psychology is a subject which arouses a great general interest, students should be made aware that these text materials in psychology deal with this discipline as a behavioral science, rather than psychology applied to personal needs. This aspect of the course should be made clear to prospective students.

Readability formulas generally deal with only two aspects of written material: the word factor and the sentence factor. Thus concepts, clarity in presenting ideas and relationships, and organization of the material are not considered. It is recommended that teachers increase students' ability to learn from the texts through instruction prior to reading as well as through review after reading. By focusing on new vocabulary and key concepts prior to students' reading of text materials, it has been found that teachers can measurably increase students' understanding.

PROJECT ADVANCE STUDENTS, 1974-75:

A Description of Students Based on the Student Descriptive Questionnaire

David Chapman

PROJECT ADVANCE STUDENTS, 1974-75:

A Description of students Based on the Student Descriptive Questionnaire

What personal, social, and academic factors describe students who were enrolled in Project Advance courses during 1974-75? How do students in Project Advance compare to college bound students generally?

These questions are frequently asked by students considering enrolling in a Project Advance course and by teachers and guidance personnel involved in student advising. Project Advance administrators and faculty need this information to more fully and accurately represent the Project to high schools considering participation in the Project and to colleges which are asked to accept university credit granted through this program.

Background of the Study

During 1974-75 a major effort was undertaken to describe the population of students enrolled in Project Advance courses in terms of background and demographic characteristics and in a way that would allow a comparison with students in other cooperative school-college programs and with college bound students generally. Information was collected using the Student Descriptive Questionnaire (SDQ) from the College Entrance Examination Board's (CEEB) Admissions Testing Program (ATP). The ATP provided information about their interests, backgrounds, activities during high school and educational plans.

In August, 1974, the College Board assigned Project Advance an institutional code number. This allowed the Project to receive a copy of a student's ATP report directly from the College Board at the student's request whenever the student indicated that code number while completing the ATP. During September, 1974, students enrolled in Project Advance courses were contacted by a letter which explained the purpose of the study and asked that they have a copy of their ATP results sent to Project Advance. Of the 1200 students enrolled during the first semester, 226 designated this number and are included in this study.

A cautionary note about the limitations of the data and the context in which they occurred: Under recent legislation governing confidentiality of student

information, the most practical way of collecting descriptive data on students is through the voluntary cooperation of the student.

Student participation in this study was voluntary and no information is available on whether this group is representative of Project Advance students overall. Consequently, generalizations about Project Advance students overall must be made with extreme caution. The same problem is encountered with the data from New York and the United States: The figures reported here are based on students who responded to the ATP and do not include all college bound students. Nationally, respondents to the ATP are equal in number to only about one-third of all 1975 high school graduates and about two-thirds of all those graduates who are going on directly to college (CEEB, 1975). As a result, what is reported here about the 1974-75 seniors who completed the ATP cannot be taken as necessarily true of all 1975 high school graduates or 1975 college freshmen.

The following narrative describes the highlights of this study. Following that, Tables 2 to 13 provide a more detailed description of these students' responses.

Highlights of the ATP Study of Project Advance Seniors

Fifty-five percent of the Project Advance students responding reported a grade point average of 3.5 or better. This average is reported by only 27 percent of college bound students in New York State generally and by only 26 percent in the United States overall.

Forty-five percent of the Project Advance students completing the SDQ were in the top-tenth of their high school class.

Project Advance respondents had a substantially higher SAT-verbal and SAT-math score than college bound respondents in New York State or in the United States generally, as indicated in the table below.

TABLE 1
1975 College Bound Seniors Completing the SDQ

	SAT-V	SAT-M
Project Advance	515	561
New York State	441	484
United States	434	472

As a group, respondents in Project Advance courses have higher educational aspirations than do college bound respondents generally. Sixty percent of the Project Advance students completing the ATP expect to continue study for a graduate or professional degree.

In New York State overall, 55 percent of the college bound students completing the ATP planned to apply for advanced placement or course credit in college. Eighty percent of the Project Advance students responding expected to do so. What about the other 20 percent of the Project Advance respondents who, by successfully completing the Project Advance course(s), would receive college credit? Several possible answers can be offered. Some students completed the ATP before enrolling in Project Advance. Some others may have been unsure about the transferability of the credit to the institution to which they wanted to go. Still others may have planned to take the course at college in order to bolster their freshman grade point average.

As a group, Project Advance students in this study were more active in high school clubs and organizations, extracurricular activities, and community and church groups than were college bound students generally. Proportionately, more Project Advance respondents received high school honors and awards than other college bound students.

Respondents from Project Advance tended to be more active in community and church groups, in athletics and high school clubs and organizations in New York State or the United States generally. In short, on the basis of the students in this study, Project Advance appears to appeal to top students who, in turn, are the student leaders of their school and community. As might be expected, Project Advance respondents, as a group, were somewhat more involved in extracurricular activities in high school than other college bound respondents, and more of those Project Advance students expect to participate in those activities in college.

The average estimated parental income of Project Advance student respondents was $22,410. For college bound student respondents generally, it was $18,952.

TABLE 2

Self-Reported Class Rank

	TOP TENTH	SECOND TENTH	SECOND FIFTH	THIRD FIFTH	FOURTH FIFTH	LOWEST FIFTH	TOTAL	NUMBER RESPONDING
PROJECT ADVANCE	PCT	PCT	PCT	PCT	PCT	PCT	PCT	
MALE	48	31	20	1	0	0	100	97
FEMALE	43	36	13	9	0	0	100	120
TOTAL	45	34	16	6	0	0	100	217
TOTAL PCT WITH THIS RANK OR BETTER	45	79	95	101	101	101		
NEW YORK								
MALE	19	23	30	25	2	0	100	46,079
FEMALE	21	25	28	25	2	0	100	47,211
TOTAL	20	24	29	25	2	0	100	93,290
TOTAL PCT WITH THIS RANK OR BETTER	20	44	73	98	100	100		
UNITED STATES								
MALE	21	25	30	21	2	0	100	395,013
FEMALE	23	27	29	20	1	0	100	409,520
TOTAL	22	26	29	21	2	0	100	804,534
TOTAL PCT WITH THIS RANK OR BETTER	22	48	77	98	100	100		

TABLE 3

Estimated High School Grade Point Average

	PROJECT ADVANCE		NEW YORK	UNITED STATES
	NUMBER	PCT	PCT	PCT
3.75-4.00	80	35	16	16
3.50-3.74	45	20	11	13
3.25-3.49	34	15	13	14
3.00-3.24	38	17	18	18
2.75-2.99	10	4	12	12
2.50-2.74	8	4	12	12
2.25-2.49	6	3	8	7
2.00-2.24	1	0	6	5
1.75-1.99	1	0	2	2
1.50-1.74	0	0	1	1
UNDER 1.50	0	0	1	1
NUMBER	223		96,570	825,588
MEAN	3.49		3.06	3.09
STD DEV	.45		.60	.59

TABLE 4

Scholastic Aptitude Test (SAT) Scores

	PROJECT ADVANCE				NEW YORK		UNITED STATES	
	VERBAL		MATH		VERBAL	MATH	VERBAL	MATH
SCORE	NUMBER	PCT	NUMBER	PCT	PCT	PCT	PCT	PCT
750-800	2	1	11	4	0	1	0	1
700-749	7	3	17	7	1	3	1	2
650-699	15	6	27	11	2	5	2	4
600-649	35	14	44	17	5	9	5	8
550-599	38	15	44	17	8	12	8	11
500-549	51	20	48	19	13	16	13	15
450-499	45	18	30	12	16	16	16	16
400-449	26	10	15	6	18	13	18	14
350-399	24	9	14	5	16	12	16	14
300-349	10	4	3	1	12		12	9
250-299	3	1	3	1	6	4	7	5
200-249	0	0	0	0	2	1	3	1
NUMBER	256		256		131,529	131,520	996,428	996,391
MEAN	515		561		441	484	434	472
STD DEV	102		107		108	115	109	115

TABLE 5

SAT - Verbal Subscores

		PROJECT ADVANCE		NEW YORK	UNITED STATES
Reading Comprehension	Score	Number	Pct	Pct	Pct
	75-80	1	1	0	0
	70-74	5	3	1	1
	65-69	15	8	3	2
	60-64	16	8	5	4
	55-59	38	19	9	8
	50-54	36	18	15	14
	45-49	32	16	16	16
	40-44	22	11	16	16
	35-39	15	8	13	14
	30-34	14	7	12	13
	25-29	4	2	6	7
	20-24	1	1	3	4
	NUMBER		199	88,583	719,698
	MEAN		50.4	44.3	43.4
	STD DEV		11.0	11.3	11.2
Vocabulary	75-80	0	0	1	0
	70-74	5	3	1	1
	65-69	13	7	3	3
	60-64	21	11	6	6
	55-59	25	13	8	7
	50-54	42	21	12	11
	45-49	37	19	17	17
	40-44	23	12	16	16
	35-39	18	9	14	14
	30-34	10	5	11	12
	25-29	4	2	6	6
	20-24	1	1	5	6
	NUMBER		199	88,578	719,702
	MEAN		49.7	43.8	43.1
	STD DEV		10.5	11.6	11.9

TABLE 6

Educational Goals

	PROJECT ADVANCE	NEW YORK	UNITED STATES
Number Responding	224 Total	95,473 Total	
	PCT	PCT	
Two-Year Training Program	1	6	
Associate in Arts Degree	0	2	
BA or BS Degree	23	24	
MA or MS Degree	29	23	
MD, PHD, Other Professional Degree	31	21	
Undecided	16	24	
Two-Year Program or Degree	1	8	
Graduate Study	60	44	
Plan to Apply for Advanced Placement or Course Credit in College			
English	144		
Mathematics	59	NA	NA
Foreign Languages	35		
Sciences	70		
History	42		
	350 requests by 183 students representing 80 percent of the students responding to the SDQ	93,667 requests by 56,362 students representing 55 percent of the students responding to the SDQ	861,875 requests by 496,897 students representing 58 percent of the students responding to the SDQ

TABLE 7

Latest Self-Reported Grades by Subject

	ENGLISH		MATHEMATICS		FOR. LANGUAGE		BIO. SCIENCE		PHY. SCIENCE		SOC. STUDIES	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
PROJECT ADVANCE												
A (4.0)	60	70	37	45	47	51	63	52	63	39	64	60
B (3.0)	35	27	32	42	39	36	29	41	35	50	33	30
C (2.0)	5	2	10	12	11	11	7	7	2	11	3	2
D (1.0)	0	1	0	1	2	2	1	1	0	0	0	0
F (0)	0	0	1	0	0	0	0	0	0	1	0	0
NO GRADED COURSES	0	0	0	0	1	0	0	0	0	0	0	0
NUMBER RESPONDING	95	125	97	125	96	122	92	122	89	111	96	125
MEAN GRADE (BY SEX)	3.55	3.67	3.43	3.31	3.32	3.36	3.54	3.43	3.61	3.25	3.60	3.58
MEAN GRADE (BOTH SEXES)	3.62		3.36		3.34		3.48		3.41		3.59	
PCT HONORS COURSES	23	18	42	26	24	17	26	11	28	12	25	14
NEW YORK STATE												
A (4.0)	27	42	30	29	24	37	30	29	30	26	35	36
B (3.0)	51	48	37	38	36	38	43	44	44	48	46	46
C (2.0)	19	9	25	24	28	19	23	21	22	22	16	15
D (1.0)	2	1	7	8	10	5	4	4	3	3	2	2
F (0)	0	0	1	1	2	1	0	0	0	0	0	0
NO GRADED COURSES	0	0	0	0	1	0	0	0	1	1	0	0
NUMBER RESPONDING	47,058	49,476	46,860	49,161	42,840	46,830	44,519	46,946	42,190	42,097	46,878	49,324
MEAN GRADE (BY SEX)	3.03	3.31	2.88	2.87	2.71	3.07	2.98	2.99	3.01	2.96	3.15	3.17
MEAN GRADE (BOTH SEXES)	3.18		2.87		2.90		2.98		2.98		3.16	
PCT HONORS COURSES	12	16	17	14	8	10	12	11	11	9	12	12
UNITED STATES												
A (4.0)	29	45	27	26	25	39	31	34	31	28	40	44
B (3.0)	50	45	38	38	36	38	43	43	43	45	43	42
C (2.0)	19	9	28	28	28	13	22	19	22	22	15	12
D (1.0)	2	1	7	7	8	4	3	3	3	3	2	1
F (0)	0	0	1	1	2	1	0	0	0	0	0	0
NO GRADED COURSES	0	0	0	0	0	0	0	0	0	1	0	0
NUMBER RESPONDING	400,099	423,584	398,359	422,129	353,049	390,009	378,840	406,393	360,686	358,867	396,364	420,530
MEAN GRADE (BY SEX)	3.05	3.34	2.83	2.82	2.76	3.11	3.01	3.09	3.01	2.99	3.22	2.29
MEAN GRADE (BOTH SEXES)	3.20		2.82		2.95		3.05		3.00		3.25	
PCT HONORS COURSES	12	15	16	13	7	8	10	9	10	8	8	8

TABLE 8

Number of Years of Study by Subject

	ENGLISH		MATHEMATICS		FOR. LANGUAGE		BIO. SCIENCE		PHY. SCIENCE		SOC. STUDIES	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
PROJECT ADVANCE	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
NO COURSES	1	0	0	0	1	1	7	6	2	6	0	1
ONE YEAR	0	0	0	0	3	2	59	60	16	28	0	0
TWO YEARS	1	0	2	5	15	9	25	30	33	36	1	0
THREE YEARS	0	2	16	27	34	38	7	2	43	23	30	31
FOUR YEARS	77	81	50	54	36	29	2	1	5	6	61	67
FIVE OR MORE YEARS	21	17	32	14	11	22	0	1	1	1	8	1
NUMBER RESPONDING	98	128	98	128	98	128	97	125	96	124	98	128
MEAN NUMBER OF YEARS	4.15	4.16	4.11	3.77	3.34	3.57	1.38	1.35	2.36	1.95	3.77	3.00
NEW YORK STATE												
NO COURSES	0	0	0	0	7	4	5	5	8	12	0	0
ONE YEAR	0	0	2	4	7	6	59	58	30	38	1	0
TWO YEARS	1	0	8	15	30	21	25	26	33	31	2	2
THREE YEARS	4	4	29	42	37	39	7	8	21	13	34	38
FOUR YEARS	89	88	50	33	14	21	4	3	7	6	58	56
FIVE OR MORE YEARS	5	6	12	6	4	9	1	0	1	0	5	4
NUMBER RESPONDING	47,496	50,277	47,429	50,211	47,051	49,995	46,733	49,179	45,984	47,672	47,229	50,014
MEAN NUMBER OF YEARS	3.98	3.99	3.62	3.23	2.56	2.93	1.46	1.46	1.93	1.64	3.64	3.61
UNITED STATES												
NO COURSES	0	1	0	0	11	8	5	4	9	15	1	1
ONE YEAR	0	0	2	3	12	10	58	58	34	44	4	4
TWO YEARS	1	1	10	20	42	36	28	30	34	29	17	18
THREE YEARS	10	9	28	39	21	24	6	6	17	9	37	40
FOUR YEARS	81	80	50	34	11	17	2	2	5	3	37	33
FIVE OR MORE YEARS	8	9	9	4	3	5	1	0	1	0	5	4
NUMBER RESPONDING	403123	428632	402850	428264	399707	426422	399446	424147	394682	414223	400537	425819
MEAN NUMBER OF YEARS	3.94	3.96	3.55	3.15	2.17	2.49	1.44	1.45	1.79	1.44	3.21	3.14

TABLE 9

Self-Reported Skills and Abilities

	PROJECT ADVANCE					NEW YORK					UNITED STATES				
Number Responding to at Least One Area	97 MALES					46,854 MALES					399,789 MALES				
	TOP 1%	TOP 10%	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	TOP 1%	TOP 10%	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	TOP 1%	TOP 10%	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE
	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
Ability to Get Along with Others	21	38	36	4	1	20	34	31	15	0	21	36	30	13	0
Acting	3	17	29	38	13	4	10	24	49	13	4	11	25	48	13
Art	1	16	20	48	15	4	10	23	44	20	4	10	23	43	20
Athletics	8	28	29	30	4	12	27	33	25	3	12	28	32	25	3
Creative Writing	8	26	37	24	4	5	17	32	39	7	5	18	33	37	7
Leadership	9	33	35	20	2	11	26	32	29	2	11	29	32	26	2
Mathematics	22	46	15	17	1	11	25	27	30	7	10	26	28	29	7
Mechanics	6	18	34	32	10	7	18	31	35	8	7	19	31	35	9
Music	10	15	26	26	24	6	12	21	36	25	6	13	21	34	26
Organizing for Work	13	39	31	15	2	7	21	36	34	2	7	22	37	32	2
Sales	9	18	29	37	7	6	16	29	42	7	6	16	31	40	7
Science	21	35	32	12	1	9	22	31	34	5	7	22	32	33	5
Spoken Expression	10	32	41	15	2	7	20	34	36	3	7	21	35	34	3
Written Expression	11	35	38	16	1	[illegible]	20	34	35	4	7	22	35	33	4
Number Responding to at Least One Area	123 FEMALES					49,245 FEMALES					423,679 FEMALES				
Ability to Get Along with Others	23	38	27	12	0	22	32	31	15	0	23	35	30	12	0
Acting	3	14	22	54	7	4	9	22	55	10	4	10	23	53	10
Art	2	15	26	49	7	4	12	24	44	17	4	12	24	43	18
Athletics	8	17	33	38	4	6	15	29	46	5	5	15	28	44	7
Creative Writing	14	23	27	34	2	6	16	32	40	6	5	17	33	38	6
Leadership	14	20	35	30	2	9	21	29	37	3	9	25	30	33	3
Mathematics	8	37	29	20	5	6	18	26	39	11	5	18	27	40	11
Mechanics	2	7	30	45	16	1	5	17	51	26	1	5	16	48	31
Music	8	20	33	33	7	6	13	27	40	15	6	15	27	37	14
Organizing for Work	12	36	30	21	[illegible]	9	20	36	34	1	9	23	37	31	1
Sales	5	12	26	48	9	4	12	27	50	7	5	14	28	46	7
Science	7	21	28	40	4	3	12	26	[illegible]	10	3	13	27	47	10
Spoken [illegible]pression	10	21	39	27	3	7	18	33	39	3	7	19	34	37	3
Written [illegible]pression	16	22	37	25	1	9	20	34	34	3	8	22	35	32	3

TABLE 10

Participation in High School Clubs and Organizations

	PROJECT ADVANCE	NEW YORK	UNITED STATES
	PCT	PCT	PCT
No Participation	4	17	14
Member	54	54	52
1-2 Major Offices	33	22	25
3-4 Major Offices	7	5	7
More than 4 Offices	3	1	2
Major Office Holders	43	28	34
Number Responding	223	95,818	824,538
High School Honors and Awards			
None	37	51	48
1-2	39	31	31
3-4	14	11	12
5-6	5	4	4
More than 6	5	3	4
At Least One	63	49	51
Number Responding	221	93,952	814,508

TABLE 11

Participation in Community and Church Groups

	PROJECT ADVANCE	NEW YORK	UNITED STATES
	PCT	PCT	PCT
No Participation	9	19	16
Nominal Participation	21	20	18
Active	34	32	30
Very Active	13	11	11
Leader	23	18	25
More than Nominal Participation	70	61	66
Number Responding	220	94,216	815,899
Participation in Athletics			
No Participation	18	15	20
Individual, Intramural	38	44	39
Varsity, But No Letters	13	12	12
Varsity Letter in 1 Sport	15	15	16
Var LTRS/2 or More Sports	17	13	13
Varsity Participants	45	40	41
Number Responding	218	95,120	815,848

TABLE 12

Extracurricular Activities in High School and Plans for College .

Number Responding to at Least One Activity	PROJECT ADVANCE 220 Total		NEW YORK 93,911 Total		UNITED STATES 807,725 Total	
	ACTIVE IN H.S.	WILL BE ACTIVE	ACTIVE IN H.S.	WILL BE ACTIVE	ACTIVE IN H.S.	WILL BE ACTIVE
	PCT.	PCT.	PCT.	PCT.	PCT.	PCT.
Athletics, Incl. Intramural and Community	73	60	71	60	68	55
Ethnic Organizations	9	10	8	9	7	8
Journalism, Debating, Dramatics	40	38	29	29	30	27
Music, Incl. Bank, Orchestra, Chorus	49	30	33	23	34	23
Departmental or Preprofessional Clubs	22	25	12	19	16	21
Religious Organizations	46	28	31	17	36	24
Social or Community Clubs	61	61	44	47	46	47
Student Government	36	31	25	24	26	23

TABLE 13

Annual Parental Income by SAT Average

SAT Average	PROJECT ADVANCE		NEW YORK		UNITED STATES	
	Total PCT	Mean Income	Total PCT	Mean Income	Total PCT	Mean Income
750-800	0.6	$19,000	0.1	$30,212	0.1	$27,999
700-749	1.7	$21,083	0.9	$27,706	0.8	$25,708
650-699	9.4	$28,074	2.9	$25,228	2.5	$24,353
600-649	14.9	$28,870	6.5	$22,557	5.7	$23,069
550-599	19.9	$24,715	11.2	$20,631	10.2	$21,706
500-549	27.1	$20,969	16.2	$19,737	15.0	$20,671
450-499	10.5	$16,697	18.8	$18,443	18.1	$19,571
400-449	7.2	$20,500	17.8	$17,628	18.0	$18,574
350-399	7.2	$15,192	13.2	$16,125	14.4	$17,052
300-349	1.7	$ 6,250	8.0	$14,727	9.3	$15,263
250-299	0.0		3.6	$12,570	4.7	$12,384
200-249	0.0		0.6	$10,339	1.0	$ 9,583
Overall Mean Income	100.0	$22,410	100.0	$18,448	100.0	$18,952
Students Responding	181		77,018		674,320	

COLLEGE CREDIT DURING HIGH SCHOOL:
Does it help in College Admissions?

David Chapman
Suzuanne Rice
Olcott Gardner

College Credit During High School
Does It Help in College Admissions?

Do students who earn college credit for work completed in high school through Project Advance have a better chance of being accepted by the college of their choice than do students who did not earn this college credit? Project Advance, working in ccoperation with the Jamesville-Dewitt School District and the State Education Department, investigated that question in a study that involved over twenty high schools across New York State.

Background

An increasing number of programs are being developed that offer high school students an opportunity to earn college credit during their senior year in high school. They range from the national scope of the Advanced Placement Program to the cooperative arrangements between a single high school and a local community college. The most recent expansion of these cooperative programs has been with the regional and statewide programs. These programs have enjoyed popularity for several reasons. They serve to reduce curriculum duplications between high school and college, the time required for the high school diploma and the baccalaureate degree, and the senior year boredom or "senioritis" by introducing new options (Carnegie Commission, 1973; Blanchard, 1971; Nelson, 1973; Wilbur, 1974). For these reasons, programs offering college credit have been rapidly adopted by high schools.

One recently developed cooperative program is Project Advance. Project Advance is a cooperative program between Syracuse University and New York State school districts. Selected courses, developed and implemented at the University by cooperating academic departments and the Center for Instructional Development, are piloted on campus and then offered for both high school and university credit in participating high schools as part of their regular school program. The courses are part of the regular teaching load of the high school teachers, who attend special university training workshops and seminars and teach the course under the supervision of university faculty. The grading standards for the course are the same on- and off-campus. During 1974-75 the project operated in 39 schools from Long Island to Buffalo with an enrollment of over 1700 students.

The Present Study

A question frequently posed by guidance personnel and students concerned with college is whether the Syracuse University credit earned through Project Advance puts the student in a more favorable position in the admissions process at the colleges to which he may apply. The Evaluation staff of Project Advance and Dr. Olcott Gardner of the Evaluation Center of the Jamesville-Dewitt School District investigated this question using the College Acceptance Profile (CAP) with students in eighteen high schools across New York State. The project was funded by a grant from the New York State Bureau of Guidance.

The College Acceptance Profile (CAP) is a computerized system (developed by the Evaluation Center of the Jamesville-Dewitt School District) that enables schools to determine the acceptance profile that their graduates have with the battery of colleges to which their students apply. Specifically, it creates a performance-ability index based on one to five criteria (e.g., rank in class, standardized tests, scholastic average).[1] A computerized record of these criteria is kept on each student who applies to college. The average index value for high school students who are accepted, who are rejected, and who are placed on a waiting list can be calculated for each college to which students apply. The system was developed as a technique to assist high school counselors in advising students. Using the CAP, each high school can compute:

a) the mean index value for students accepted at each college,
b) the mean index value for students rejected at each college, and
c) the mean index value of students placed on the "waiting list" at each college.

The system assists counselors in several ways. First, it allows guidance counselors to advise students more accurately concerning the probability of their acceptance at colleges to which they apply. Second, as the average index values at which a college accepts students change over time, it provides high schools with an indication of changes in the admissions policies of particular colleges. Third, it provides guidance counselors with a data base from which to draw in dealing with a college about a particular student. It would help identify situations where a fuller explanation from the college is warranted, particularly in cases where the student has been rejected.

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[1] The formula for creating this performance-ability index is described in Appendix A of this report.

Project Advance used the College Acceptance Profile to determine if, on the basis of four criteria, students receiving college credit through Project Advance had a greater probability of acceptance to the college of their choice than students who did not participate in the program. These criteria included Scholastic Aptitude Test-Verbal, Scholastic Aptitude Test-Quantitative, high school grade point average, and high school rank in class.

A member of the guidance staff in each of the participating schools coded one computer card for each college-bound student in the senior class. Each card contained the student's scores on the four criteria, the code for the first four colleges to which the student applied, a code indicating the admissions decision of each of these colleges (accept, reject, waiting list) and an indication of participation or non-participation in Project Advance. The individual identity of students was not necessary to the Project Advance study and was not requested of the high school. The samples used in the Project Advance analysis were matched on the basis of mean index value, not personal factors. A sample of the CAP computer card is provided in Figure 1. However, some schools included a code by which the high school could identify individual student data for high school use when it was returned to the guidance office.

The state funds covered the expenses of implementing and operating the college Acceptance Profile in the participating high schools free of charge during the first year of the study. This included on-site training in the high schools on the use of the CAP and continued assistance to guidance personnel during the year in setting up their CAP record system.

Procedure

Once the data was collected, the analysis was accomplished by selecting two samples--Project Advance students and non-Project Advance students--from the pooled data on college-bound students from high schools offering Project Advance courses and participating in CAP. Groups were matched on the basis of mean index value and college to which they were applying. For example, a Project Advance student with a CAP profile of 680 who was applying to SUNY-Albany would be matched with a non-Project Advance student who also had a CAP profile of 680 and who also applied to SUNY-Albany, although possibly from a different high school. The admissions decisions of the colleges were then compared.

SAMPLE CARD FOR COLLEGE ACCEPTANCE PROFILE INFORMATION

NAME _____ (not required) YEAR _____

COLLEGES APPLIED TO AND DECISIONS

R/C	MALE OR FEMALE	PROJECT ADVANCE OR NON-PROJECT ADVANCE	SAT-V	SAT-M	SAT-E	GPA	College Code	College Code	College Code	College Code	+5
0 1 2 3 4 5 6 7 8 9			0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9 A R W ACCEPT, REJECT OR WAITING LIST	0 1 2 3 4 5 6 7 8 9 A R W ACCEPT, REJECT OR WAITING LIST	0 1 2 3 4 5 6 7 8 9 A R W ACCEPT, REJECT OR WAITING LIST	0 1 2 3 4 5 6 7 8 9 A R W ACCEPT, REJECT OR WAITING LIST	0 1 2 3 4 5 6 7 8 9

The data were examined only for colleges to which enough students applied to allow a matching sample. In all, over 200 colleges were considered. While a CAP profile was collected for 4715 students, the final tally involved 1132 students. (566 Project Advance matched with non-Project Advance. The relative frequency of being accepted, rejected, or placed on the waiting list was calculated for Project Advance and non-Project Advance students, as displayed in Table 1.)

The results of this analysis indicate no meaningful differences in the admissions decisions of colleges between students who had earned college credit through Project Advance and students that had not.

Several factors may help explain these results. Colleges may have made no distinctions because they were unaware that some students had earned this college credit. This may have occurred for two reasons. First, admissions decisions were often made before students had completed the course--in some cases, before students were sure whether they would earn credit or how much credit. Second, students frequently did not tell colleges about the credit in advance of being admitted. Frequently students caused more problems than they solved by informing a college that they were taking a college course in high school. If the college was unfamiliar with Project Advance, they sometimes told the student that the credit would not be accepted, causing minor waves of panic among students. As these colleges were contacted and became familiar with the design and standards of Project Advance courses, the eventual decision was almost always to accept the credit. In the process of contacting colleges, it became clear to Project Advance staff that the decision to admit a student was separate from and prior to the decision to accept transfer credit. Only when a college was committed to wanting the student was serious consideration given to the credit question. Consequently, students were advised to negotiate credit transfer after being admitted.

A second issue in considering the results is that Project Advance students, as a group, appear to be stronger academically and more active in extracurricular, community, and church related activities than other college-bound students in New York State or nationally (see "Project Advance Students 1974-75: A Description of Students Based on the Student Descriptive Questionnaire"). In short, they appear to be the more competitive candidates for admissions to selective schools. If differences favoring Project Advance students had been observed in admissions decisions, those differences may only have reflected the quality of students who choose to enroll in Project Advance courses, rather than

Comparison of Admissions Decisions of Project Advance and Non-Project Advance Students at Selected Institutions by College Board Scores

	Project Advance Students			Non-Project Advance Students		
	Accepted	Rejected	Waiting List	Accepted	Rejected	Waiting List
800-751	3	0	0	2	1	0
750-701	35	6	2	36	5	2
700-651	96	10	6	94	9	9
650-601	76	8	13	77	12	8
600-551	66	25	2	59	21	13
550-501	38	8	9	38	10	7
500-451	25	6	2	21	9	3
450-401	9	4	4	8	8	1
400-351	5	1	1	4	2	1
350-301	3	1	2	4	2	0
300-251	0	0	0	0	0	0
250-200	0	0	0	0	0	0
Total # of Students	356	69	41	343	79	44

the particular factor of having earned college credit.

A third factor which may have been a leveling influence on the results is that some of the non-Project Advance students may have earned college credit through other colleges' programs or have taken an Advanced Placement test. This might have offset some of the potential advantage of credit earned through Project Advance.

Conclusion

The results of this study indicate that students receiving college credit through Project Advance had about the same probability of acceptance to the college of their choice as students who did not participate in the program when those groups were matched on the basis of academic aptitude and achievement factors using the College Acceptance Profile.

APPENDIX A

Formula for Computing a Student's Index Value on the College Acceptance Profile

Formula for Computing a Student's Index Value on the College Acceptance Profile

The rank in class (RIC) and grade point averages (GPA) are converted to a value between 200 and 800 to standardize with SAT scores as follows:

RIC: The 3 digit value is subtracted from 1000, multiplied by 6/10th and added to 200.

$.6\ (1000 - RIC) + 200$

GPA: Each score is truncated to a 50-100 point range (0 to 500 internally), multiplied by 1.2 and added to 200.

$1.2\ (500 - [10\ \{100 - GPA\}]) + 200$

The RIC is given equal weight with the mean of all other values to compute the index.

$I = (RIC + [SAT\text{-}V + SAT\text{-}M + SAT\text{-}E + GPA]\ 14)/2$

A FOLLOW-UP STUDY OF THE TRANSFER OF ACADEMIC CREDIT EARNED BY 1973-74 SUPA STUDENTS

Franklin Wilbur

Overview

When a student who is matriculated at one college decides to enroll at another school, he may ask to have his college credit transferred. If the two colleges are enough alike in their educational standards, there may be no problem in getting some recognition for the transfer credit, whether that recognition be for credit towards a degree, exemption from course requirements, or both. But what happens if the student tries to transfer credit earned in a setting other than the college campus or earned in a nonconventional educational experience? For example, how would post-secondary institutions react to college credit earned by high school students in a cooperative high school-college program?

The present study investigated the policies of post-secondary institutions in recognizing college credit earned by high school students in one particular cooperative school-college venture that is being looked upon nationally as a promising program model, namely, Syracuse University Project Advance. Project Advance was developed by Syracuse University in conjunction with six public high school districts to allow motivated high school juniors and seniors an opportunity to take college courses and experience college standards as part of their regular high school program. Two Syracuse University courses (Freshman English and Introduction to Psychology) were taught in the high school by specially trained high school teachers under the supervision of Syracuse University faculty and administrators. Specifically, five major questions were addressed in the investigation:

1. How did post-secondary institutions recognize credit earned in Syracuse University Project Advance (e.g., grant credit toward degree, allow exemption from required courses)?
2. What colleges have developed written policies for evaluating college transfer credit earned by their entering freshmen while enrolled in high school?
3. Does a student's choice of major or area of concentration affect transfer credit recognition?
4. When and by whom are students informed of decisions regarding recognition of their S.U.P.A. credit?
5. Is there a pattern among post-secondary institutions of similar type, kind, and size in the way they evaluate and reward S.U.P.A. credit?

This study may well be the first of its kind in tracking each of the par-

ticipants in a high school-college articulation[1] program and in attempting to document in detail the processes involved in the transfer of credit. It represents one of the several necessary steps in probing the reaction of higher education to a new approach to articulation. Since academic credit is an important result of such high school-college ventures, a thorough understanding of how credit is evaluated by post-secondary institutions is of critical importance to program planners and participants. In addition, it will build upon research in several related areas and provide a beginning data base for future studies of secondary-post secondary credit.

Background

At present, one of the most serious problems for students moving from secondary to post-secondary institutions is the difficulty they experience in transferring credit earned at one educational level to another. Students are often frustrated by the inconsistent, confusing, and even hypocritical treatment they frequently receive from college officials who are asked to evaluate and recognize their academic credit. Credit transfer problems of this sort are increasing rapidly in all sectors of the educational system because of greater student mobility among institutions, greater diversity of student experience and academic preparation, and because of the development of new educational options. Colleges will have to solve the problem of dealing with transfer credit equitably very soon because, like it or not, they are going to encounter more and more students with transfer credit.

Transfer students are usually defined in the literature as students who have changed their matriculation from one institution of learning to another (Proia and Drysdale, 1969). Traditionally, the term has been applied to students who fit any one of four mobility patterns (Willingham, 1974):

a. transfer from a 4-year to a 2-year college
b. transfer from a 2-year to a 4-year college
c. transfer from a 4-year to a 4-year college
d. transfer from a 2-year to a 2-year college

Increasingly, students are gaining recognition for college-level achievements acquired in other segments of the extended educational system and through a variety of informal experiences. Each year, a greater number of students find themselves being considered as transfer students, or students with transfer credit,

[1]In this report, the term articulation will be used to refer to "planned programs and practices which link secondary and post-secondary curricula and which involve a high degree of systematic cooperation between the two levels."

for placement in college programs. This would include college-level competencies and academic experiences acquired through correspondence courses, military programs, proprietary schools, industrial and business sponsored programs, as well as through special programs for high school students sponsored by two- and four-year colleges and universities.

Barriers and Problems Affecting Credit Transfer. Although it is widely acknowledged that credit transfer is extremely important to the hierarchial structure of American education, institutions differ widely in their policies for recognizing credit from other educational institutions and results from independent testing agencies. Nearly all of the research related to credit transfer and competency evaluation is based on studies of students moving from two-year colleges to the upper divisions of colleges and universities or upon students who participated in credit-by-examination programs. What Carl Haag, a program director at Educational Testing Services, has written about the reception of proficiency examination scores also applies to the transfer of academic credit derived from college course work. Having considered many statistical surveys showing widespread acceptance by post-secondary institutions of transfer credit by examination (e.g., Creager, 1973), Haag comments, "What students receive when they reach the typical campus, however, may be disappointment. College policies on placement and credit are vague, procedures complex, and academic advisors unsure. Surveys of colleges suggest that less than 15 percent of entering freshmen receive exemption and only half of this group is granted credit.[2] The dissonance between student expectation and collegiate execution is one of the factors suggesting that the issue of placement, exemption, and credit by examination will receive major attention in the next five years (1975, p. 3)." What may be accepted at one institution for course exemption and credit toward graduation may be flatly rejected for consideration at another.

Many studies have shown the large number of variables involved and the variety of practices that may occur in credit transfer: for example, Gleazer (1973), Creager (1973), Sneider (in progress), and Furniss and Martin (1973), in a paper presented at the Arlie House Conference on College Transfer, mentioned several barriers to transfer which may directly affect the recognition of college credit, including credit earned in various school-college articulation programs: lack of standardized grading systems, lack of agreement on core curricula, lack of coordination between admissions office and departmental requirements, incon-

[2]Haag cites a recent survey (CEEB, 1974) in which 54% of 814,000 prospective college students surveyed said that they planned to apply for credit and/or exemption from requirements upon entrance to a college program.

sistency within an institution on credit transfer policies, and lack of agreement on credits from accredited and non-accredited institutions. Some of the additional factors that can affect credit transfer are a student's choice of major, his persistence in finding ways through and around the institutional system, and the college's recruitment needs.

Many factors are taken into account when a credit transfer policy is developed. Colleges, for example, are much concerned with finding ways to assess course work taken at other institutions and with evaluating the grading procedures used at other institutions. It is still very much the exception to find a college that awards grades based upon performance criteria. It is, for example, extremely difficult for two institutions which have student bodies with widely differing average aptitudes and abilities to maintain comparable grading standards; and, as Willingham (1974) points out, the supposed common currency of credit hours and letter grades does not always serve its purpose. He calls to the reader's attention the fact that "a 'B' at one institution is not always equal to a 'B' at another institution. This is necessarily so in a hierarchial educational system." He notes further than "individual faculties grade mostly within the normative framework of their own institution regardless of the ability level of their own students" (p. 32). D grades represent another problem in credit transfer: for many colleges such marginal passes are not accepted for transfer even though D's earned by native students (i.e., students already matriculated at that institution) count toward graduation (Kintzer, 1970). A 1973 survey by Stevens reveals that colleges are also reluctant to accept pass-fail grades for transfer credit. Not only are there significant variables in grading systems, there are also notable discrepancies between course catalogue descriptions and actual course content, a situation which causes some uncertainty over the student's represented competencies. Still another reason for faculty concern over transfer credit--a reason that usually goes unstated--is their belief that instruction at another institution is really inferior to what they offer.

Such interinstitutional differences and underlying faculty concerns often make it difficult to translate a transcript from an unfamiliar college into reasonable program placement at another. This is particularly true for curriculum articulation programs where dual credit and off-campus instruction are compounding variables. Students often encounter resistance to their transfer credit simply because it is credit earned outside the institution to which they are applying. Faculty and administrators at some institutions believe that the socialization process at their colleges would be altered in undesirable ways if normal curriculum patterns were disturbed, a change they believe could occur if

outside credit were to be recognized. Dearing (1974) tries to illustrate this point by imagining an instructor or advisor talking to a student with transfer credit:

> I am not denying the quality or the validity of the previous work that you have accomplished in your educational program. However, if you are aiming for a degree at this institution, or indeed for admission to this course or this program at the level which seems to you just, there is a requisite body of knowledge and a set of skills whose mastery you must demonstrate. For students who enter this institution as freshmen and are continuing, this mastery is demonstrated by successful completion of specific courses. Unless your previous learning experiences are very nearly identical to those of continuing students, you must be considered to have deficiencies which can best be removed by replicating their experience. Practically, this means completing the prescribed courses even though some of the material may be repetitive. (pp. 51-52)

In theory and in practice, then, it is easy to see how confusion, disagreement, and injustice could occur with regard to transfer credit.

Many of the present inequities in handling transfer credit can be traced to inadequate student advising and to various facets of organizational decision making. The tremendous variation in transfer credit policies among colleges and even among programs at a single institution is a source of continual confusion for students (Thomas, 1971). What a college catalogue states as institutional policy may really be very far from actual procedure. Administrators, academic department chairmen, and faculty often disagree about what constitutes acceptable transfer credits (Kuhns, 1973). Usually students are not notified which of their courses have been accepted or what they have left to complete until after they have been accepted, paid their fees, and officially registered in a program. Also, as Dearing (1973) and others so aptly note, "The faceless, demure, and luckless are likely to be held to requirements, whereas the brash and intrepid will always find ways through and around the system." (p. 61) As educational options and student mobility increase, an already inadequate system of advising in post-secondary institutions will be further strained, and students are likely to come out the losers (Willingham, 1974; Carnegie Commission, 1973).

A survey by Thomas (1971) documents the variety of processes used to evaluate transfer credit among American colleges and universities. The study examined problems encountered by students from junior colleges and four-year colleges in transferring their academic credit as they began a new program at various four-year colleges and universities. Three objectives of the investigation were to determine what, if any, general guidelines are used to assess transfer

credit, who at the institution makes the final decision, and when the student is informed of the decision. Sixty-five percent of a random sample of 96 accredited colleges and universities responded to a questionnaire sent to their admission offices. The findings showed that admissions and/or registrar's offices are principally responsible for awarding transfer credit and that students are usually notified of credit transfer decisions after they have been accepted by the college but before they have registered. The author noted considerable variation in transfer policies from campus to campus even though responsibility was normally an administrative function with input from the academic departments. Thomas further comments, "Generally credits earned at regionally approved colleges and universities will be considered for transfer, provided that the course grade is C or better and the course is applicable to the program pursued." (p. 35)

Other major investigations of credit transfer from 2-year to 4-year institutions shed light on numerous areas of difficulty and the broad range of practices. Knaell and Medsker (1965) found, based on a large national sample of junior college students, that over one-half lost some academic credit in transfer. In a similar study some five years later, Willingham and Finkikyan (1969) discovered that 10% of junior college transfer students lost at least one semester's worth of credit.

Nearly all of these investigations of post-secondary credit-transfer and credit evaluation practices, however, present findings that are often extremely difficult to interpret, usually because the studies are weak in design or because they use inappropriate methodology. Creager (1973), for instance, asked colleges if they granted credit for "college level work completed in high school," but this is not the same as asking if they granted credit for "college courses completed while enrolled in high school." "Grant credit" is itself ambiguous, for it may include a range of institutional actions, e.g., course exemption, advanced standing and credit toward elective area. There are, moreover, numerous variables that can affect transfer credit decisions, even within an institution--a student's choice of major, the financial status of an institution, how course titles are worded, grading systems, and the reputation of the sending institution--to name a few. Most surveys ask institutional representatives who may or may not be involved in such decisions what would happen at their institutions if an entering student tried to transfer a certain type of credit. Asking hypothetical questions of people who may not actually be involved in the decision is not a very effective way to gather reliable data, especially since these kinds of decisions are never made in a vacuum. Notable exceptions to these criticisms, however, are the follow-up investigations conducted by the Educational Testing

Service of participants in the Advanced Placement Program (e.g., Casserly, Peterson, and Coffman, 1965; Casserly, 1965). Here the researchers studied a wide range of factors that affect specific students and academic departments within institutions when decisions regarding program placement and exemption from course requirements were made on the basis of Advanced Placement examination scores. Surveys that fail to take into account factors that are known to be crucial in real decision making will not be very insightful.

All of the problems mentioned previously relate to our ability to compare and transfer learning from one situation to another. This raises many questions about the role of post-secondary institutions and their relationship to one another. Many educators agree with Kintzer (1974) that "colleges and universities have a social and even legal responsibility to provide a good product, to advertise it honestly, to advise the student adequately and to eliminate practices that erect and maintain barriers to the student's achieving his goals." (p. 73) What is also at issue is whether it is more important for education to function as an overall, coordinated system or as a field of service in which the various components are engaged in an open, competitive business.

Methodology and Procedures

The present investigation seeks to add to the scant body of literature related to the reward and recognition by post-secondary institutions of college credit earned by students participating in various school-college articulation arrangements. The strategy used to gain additional insight into current practices within higher education was to contact participants of the 1973-74 pilot of Syracuse University Project Advance (SUPA) and the college and universities in which they subsequently enrolled. Both students and institutional representatives were asked to indicate how specific units of course credit were recognized as applicable toward degree requirements and to explain their perceptions of the procedures and processes involved in arriving at such decisions. The rationale for such a design is based upon several concerns:

1. SUPA is a fast growing program involving an increasing number of high schools, students, and, in a receiving capacity, colleges and universities across the country. It is also important to note that this program is open to all college-bound students within each participating high school with few entry restrictions. It is not, in other words, a program strictly for the gifted. This particular program is also receiving considerable attention from a broad cross-section of high schools plus post-secondary institutions as a general model for school-college cooperative programming

that may be emulated in other locations. Information about the acceptability of academic credit generated in this fashion is essential for those involved and considering involvement in such activities.

2. The few studies that have tried to assess how colleges and universities have recognized credit originating from articulation arrangements have often used methodologies that severely limit the utility of the findings. Surveys, for example, which ask institutional representatives to indicate how they would recognize course credits completed under certain hypothetical conditions that are unrealistic. The literature suggests that a range of variables affects even the transfer credit of tranditional groups, e.g., students moving between 2-year colleges, 4-year colleges, and universities. There is no reason to suspect that such variables, as well as others, would not also affect academic credit earned in relatively new settings. Meaningful data can only be gathered in situations where actual decisions are being made by college officials related to real credit, real students, and actual articulation arrangements. Any generalizability lost because the study has been grounded in a specific context, is more than compensated for by the likely increase in the validity of the findings.

3. A third and equally important reason for studying how credit generated by a specific program was received was to be able to collect data in a situation in which the participants clearly understood the motives of the investigator and would probably wish to respond accurately and candidly. It was felt that other colleges and universities receiving SUPA students would appreciate Syracuse University's urgent need to understand their treatment of the credit. Likewise, it was anticipated that most students would want to tell Syracuse University and future participants how their efforts in the program had been recognized and rewarded. This parallels the strategy employed by several very successful studies conducted by the College Entrance Examination Board related to their Advanced Placement Program (Casserly, 1967; 1968).

Sources of Data. The two major sources of data for the investigator were the 396 students who participated in the 1973-74 pilot year of Syracuse University Project Advance and the 102 post-secondary institutions who received these high school students in the fall of 1974 as entering freshmen. The number of both students and institutions was small enough to be entirely included in the investigation, yet large enough to provide a sufficient sample for this preliminary study. Two student categories were identified: those who requested that credit

earned through SUPA be transferred to other institutions and those who did not request credit transfer. It was expected that students in the latter category would provide as interesting insight into the kinds of barriers students encounter in attempting to transfer credit as those in the former category. They may, for example, have been so discouraged by a rigid negative response from an admissions office official upon initial inquiry that they did not even request that an official transcript from Syracuse University be forwarded.

Procedures. Students were separated into either a "T" (Transferring) or "NT" (Non-Transferring) group based upon whether or not they requested that a transcript of their SUPA course records be forwarded to a college or university. Figures in Table 1 reflect total numbers of students and institutions in each of the three categories.

TABLE 1

Total Population of SUPA Students Transferring Credit, Students Not Transferring Credit, and Receiving Institutions

Category	Count
"T" Students	223
"NT" Students	173
Institutions	102

Separate packets containing a cover letter, instructional sheets, and various instruments were individually prepared for each student and institution. A description of the construction and purpose of each item used in the survey follows.

Transferring "T" Students. Each student transferring SUPA credit to a college or university was requested, in a cover letter, to respond to a brief questionnaire and to indicate on a separate instrument how his or her credit was received (see appendix). The questionnaire was intended to collect information that would help profile from each student's perspective, the institution's procedures for evaluating transcripts. "Who makes decisions?" "When are students notified?" "Does written policy exist?" and "What effect does choice of major make in credit acceptance?" were the primary questions. These items were selected to confirm information requested from institutional officials and to allow com-

parison with research findings in related areas. "T" students also received a complete record of their SUPA course grades on individually prepared forms. Each student, as indicated in an accompanying set of directions, was asked to indicate, to the best of his knowledge, how each SUPA course, or portion of the course, had been recognized. Various institutional actions (e.g., credit only, exemption only, credit and exemption) were designed to provide mutually exclusive categories. The term or terms used to label each category were explicitly defined in accompanying instructions.

Institutions. Student transcripts of SUPA coursework were sent to 102 post-secondary institutions. Although it was expected that some students may have changed their minds about attending specific institutions since their initial transcript requests, it was the most accurate information available as to which colleges and universities had received SUPA students. As with "T" students, receiving institutions were asked to complete a questionnaire giving general descriptive data on the institution, e.g., type, kind, size, highest degree granted (see appendix). In addition, institutional representatives were asked to indicate what office is usually responsible for credit transfer decisions, when students are notified of such decisions, whether written policy presently exists for making such decisions, and if a students' choice of major could affect the way in which credit is treated. Questions were selected to corroborate student data and to explore questions frequently discussed in related literature. Accompanying instructions also requested the institutional official to indicate how each student's SUPA course credit was recognized. Institutions received individual copies of "Student Data Record Sheets" (identical to those sent to the student) on which they were to indicate, based upon official records, how each course or portion of a course served as a part of the student's degree program. Although some institutions were sent as many as twelve "Student Data Record Sheets," the usual number of SUPA students attending each institution was one or two. Instructions for completing each form were identical to those sent to "T" students. The purpose of this duplication of information regarding treatment of credit was to examine how accurate the student's perceptions were of actions taken by institutions. A duplicate packet containing all items in the original mailing with an appropriately revised cover letter was sent one month after the initial mailing to all institutions delinquent in their returns.

"NT" Students. A questionnaire and cover letter were sent to all SUPA participants who, for one reason or another, had not requested an official Syracuse University transcript (see appendix). The primary purpose of con-

tacting these students was to find out why they had not requested transcripts. Had they decided not to enroll in a post-secondary institution? Did they think they had requested a transcript of their grades when, in fact, no such request had been received by Syracuse University. Were they so discouraged by initial refusal from an institutional representative to accept the credit that they didn't bother to request an official transcript. Did they feel their grades were too low? These were among the types of questions asked in order to get another perspective on the barriers and problems encountered by students in transferring academic credit. Since this was the first time that they, as graduating high school students, were being asked to initiate the transfer of some of their personal academic records, the investigator wanted to see just how many students were simply unclear about procedure; he also wanted to render them assistance where possible.

Methodological Assumptions and Limitations

In discussing and drawing implications from data collected in this investigation, certain limitations must be considered. First, the study was based upon the transfer of credit by students who had participated in one specific articulation program. The fact that the program is operated by, and that the transcripts emanate from, a major private university of sound academic reputation would almost certainly cause some institutions to treat the credit differently than if that credit had originated from an obscure private two-year college. Secondly, the participating institutions, on the average, received only one or two SUPA students. Transfer credit decisions during this first year often may have been based on little in the way of official policy or actual precedent. As more and more students with SUPA credit, or academic coursework completed under under similar arrangements, enroll at institutions, colleges and universities may re-examine and revise their policies. A third concern is that evaluation devices such as those used in this study not only attempt to measure reality, but they may also, in fact, create part of the reality they measure. Special attention was called to the transfer credit of SUPA participants through the letters, questionnaires, and student record sheets that were sent to the receiving institutions. SUPA participants were also very much aware, perhaps more than most other students with transfer credit, of the need to persist in requesting prompt and positive decisions from college officials, an awareness created by their being reminded of the experimental nature of the SUPA program.

Participating colleges also knew that information regarding their handling of SUPA transfer credit would be disseminated to literally tens of thousands of high school students across New York State. They may, as a result, have had more than the usual inducement to accept SUPA credit toward degree requirements.

Description of Student and Institutional Returns

The problem of low percentage of returns so common to many studies using questionnaires as the main source of data presented no difficulties in this investigation. Table 2 summarizes the number of instruments returned by the 396 students who were sampled.

TABLE 2
Number of Questionairres Sent and Returned by "T" and "NT" Students

	Questionnaires			
	Sent	Initial Return	With Follow-up	% Final Return
"T"	223	116	145	65.0
"NT"	173	63	79	47.7
Total	396	179	224	56.6

A total return of 56.6% or 224 was realized with a follow-up mailing. 65.0% of the students requesting transcripts (T group) ultimately responded to the survey, while 45.7% of the students who did not request transcripts (NT) returned questionnaires.

Of the 102 institutions originally sent instruments, twelve indicated that students who had requested that SUPA credit be transferred to their institution never actually enrolled. Eliminating these returns, 79 or 87.8% of the 90 institutions responded. Table 3 describes the institutional sample across three variables: type, kind, and size.

TABLE 3

Institutional Returns Sorted by Type, Kind and Size

	Variable	Number	%
TYPE	2-year college	10	12.7
	4-year college	43	54.4
	university	26	32.9
KIND	public	49	62.0
	private	30	38.0
SIZE	under 1000	13	16.5
	1000-2000	11	13.9
	2000-5000	29	36.7
	5000-10,000	16	20.3
	over 10,000	10	12.7

When the three variables--type, kind, and size--were considered simultaneously as in a three dimensional matrix, it could be seen that SUPA students tended to more frequently enroll in privately managed, four-year colleges, with undergraduate populations within the range of 2000-5000. They enrolled least frequently in public two-year colleges.

Findings

In the sections that follow, only a brief summary will be made of the findings as related to each of the major questions explored in the study.

Written Policy. One important question on both institutional and student questionnaires was whether colleges currently have written policy for transfer credit evaluation that would apply to their entering freshmen who participated in SUPA. Based upon institutional returns, 47 of 79 or 59.5% of the sample reported that they had no appropriate written policy. Although there were no significant differences between public and private institutions in this respect, it appears that universities, as compared to four-year and two-year colleges, are most likely to have established written policy dealing with this type of credit; perhaps this is due to their more frequent activity in evaluating student credentials from the widest range of academic, social, and cultural backgrounds.

Students were similarly divided in their opinions of whether written policy applicable to their SUPA credit existed at their college. Of the 145 "T" students returning questionnaires, 64 (44.1%) felt there was established written policy while 81 (55.9%) indicated that they know of no policy or simply admitted ig-

norance to the question. A random sample of approximately two dozen college catalogues supports this finding. In only one instance did a catalogue recognize that some of their entering freshmen would be bringing with them college credit earned while still enrolled in high school and indicated how it would be evaluated for credit toward a degree.

Responsibility for Credit Transfer Decisions. Responses from institutional representatives indicated that the responsibility for credit transfer decisions is chiefly an administrative rather than academic function. That is, the registrar's and admissions offices were charged with the responsibility in nearly 55% of all cases, whereas the function was placed in the hands of the college dean and department chairmen in approximately 20% and 10% of the time respectively. However, when broken down according to public-private status, it was observed that in private colleges and universities there is considerably more involvement on the part of academic representatives, i.e., department chairmen, deans, and student advisors with much less authority resting with the admissions departments.

Overall statistics from student responses show that they were usually informed of the decision regarding their SUPA transfer credit through administrative offices. Word reached students via the registrar's office in 47 cases (33.3% of the sample) and the admissions office in 34 cases (24.1%). However, the role of the advisor became more important as a contact between the office that makes the decision and the student as indicated by 20 respondents (14.2%). Department chairmen contacted students in 16 instances (11.3%).

Effect of Major. Both institutional representatives and students were asked if a choice of major or area of concentration would affect transfer credit recognition. Contrary to what might be expected from a review of the literature, 97.1% of all students transferring SUPA credit said they were told that it would not. Institutional responses were somewhat more divided as only 68.8% or 53 colleges and universities agreed that choice of major would not affect transfer credit recognition.

A closer examination by type, kind, and size of institution allows interesting observations to be made. Four-year colleges overwhelmingly indicated that choice of major would have minimal effect on credit transfer decisions in 35 or 81.4% of such institutions. Among 2-year colleges and universities, the opinion was fairly evenly divided with 50.5% and 54.2% No response, respectively.

Differences may also be seen when the responses are sorted by kind of institution. The majority of returns from private institutions (77.6%) reported that the choice of major would not be a factor in transfer decisions, regardless

of the courses involved. Opinion among public institutions, on the other hand, was more divided, with 46.4% of the responses indicating what major could have an effect.

To summarize, the choice of major or area of concentration is not given as a factor affecting transfer credit decisions at the majority of institutions regardless of type, kind, and size. Responses do indicate that it is more likely to be taken into consideration at public institutions and at the larger institutions, particularly the universities.

When Are Students Informed? Another aspect of the decision-making pattern related to inter-institutional credit transfer is when institutions are able to give students notification of how their credit will be recognized. The question on the institutional questionnaire read as follows: "When does your institution inform entering freshmen of decisions (tentative or otherwise) regarding recognition of their college transfer credit?" The response to this question was, of course, dependent upon the institutional official or officials having available to them whatever information they feel is necessary to make such a decision. This varies from an official transcript to information as stated on a student's application or in an interview situation. The question also implies that the student has requested that such an evaluation be made.

Overall statistics, based upon institutional returns, show that 17 (21.5%) respondents indicated that their institutions notify students of transfer credit decisions before acceptance, 45 (57.0%) before registration but after acceptance, and 17 (21.5%) after acceptance and official campus registration. Responding to the question of when their college or university notified them of a decision regarding their SUPA transfer credit 23 (16.3%) "T" students indicated notification before acceptance, 44 (31.2%) after acceptance but before registration, and 74 (52.5%) after acceptance and registration. Discrepancies between normal institutional policy for notifying students (based upon institutional returns) and when SUPA students were actually notified could be due to at least four factors. Although procedures have since been established to facilitate record keeping, official Syracuse University transcripts were not available the first year of the program until a week after normal fall campus registration. Some colleges that normally notify students earlier may have had to delay their decisions until after the official transcripts of grades arrived. Second, many high school students, unaccustomed to initiating records transfer, delayed in requesting either a transcript of their SUPA course grades or in asking the receiving college to decide upon appropriate action. A third consideration is

that colleges may not notify students as early in fact as they do in theory. And finally, since Syracuse University Project Advance did not fall directly under written procedures established to deal with transfer credit at most institutions, decisions may have been delayed because college officials were unfamiliar with such practices.

Sorting the returns by kind of institution, representatives from the public sector indicated the vast majority of cases (83.3%) that entering students are informed of transfer credit decisions after official acceptance into a program but before campus registration. Only two respondents from the public institutions indicated that it was the practice to delay notification until after registration. There was considerably more variation, however, among private colleges and universities. Fourteen (28.6%) of the private institutions signified notification before acceptance, 20 (40.8%) after acceptance but before registration, and 15 (30.6%) after both acceptance and official registration. Such variation is further reinforced by the fact that private institutions supplemented the questionnaire much more frequently (40.8%) with comments and clarification of procedure than did public institutions (26.7%). This may reflect greater complexities in the decision-making process in the private sector and fewer "cookbook" guidelines.

In summary, returns from institutions indicate that the student is usually notified of transfer credit decisions before registration but after acceptance. This is particularly the case among all types and sizes of public institutions. Private institutions, on the other hand, vary considerably among types and sizes regarding timing of student notification.

Non-Transcript Requesting Group Returns. The open-ended item requesting "additional comments" on the questionnaire sent to students (NT) who did not request a transcript of their SUPA grades was by far the most informative item. Fifty-two of the 79 NT students returning instruments reported that they were attending college. Many of the comments and responses to other items on the questionnaire indicate a widespread misunderstanding of procedures for grade transfer between institutions. Despite handouts and repeated explanations by both SUPA staff and high school teachers, many students still did not realize it was their responsibility to request that an official transcript of their SUPA grades be compiled and forwarded to the college they would be attending. This problem clearly calls for further emphasis of procedure and clarification of responsibility in future student orientation sessions and in course manuals.

Nineteen (24.4%) of the "NT" student returns indicated that they actually did request a transcript. The author wrote all students to inform them either that they were in error or that their request had been mislaid. In either case, they were advised to request a new one. Some of this confusion was undoubtedly due to the administration of a questionnaire in the spring of 1974 asking students to indicate where they planned to attend college, their anticipated major, and other questions related to future goals. Some students may have thought that this instrument was a transcript request.

Overall, the "NT" students were among the lowest in academic achievement in SUPA courses and had negative comments (e.g., poor teaching, course work boring, misleading information given) about their experiences in the program much more often than did students in the "T" group. Also, students surveyed in this group failed to complete their questionnaires more often and had a higher rate of delinquent returns. The survey of "NT" students produced several very useful results: it brought to light basic misunderstandings about the goals of the program; it pointed out poor screening of some students who probably would have benefited by enrolling in another type of senior year alternative; and it revealed a need to explain the procedures of credit transfer better.

Recognition and Reward of SUPA Course Credit. As indicated in the description of the methodology, both institutional representatives and "T" students were asked to indicate how credit earned in SUPA was recognized and rewarded as transfer credit. Since one objective of the investigation was to compare and contrast institutional and student views of how the credit was received, only "matched pair" returns were compiled for the first analysis. The term "matched pair" refers to data resulting from the returns of the "T" student questionnaire and the institutional questionnaire for each individual student included in this sample. This results in two directly comparable perspectives on the treatment of SUPA credit.

Table 4 summarizes returns from institutional representatives who supposedly obtained the information regarding the treatment of each student's transfer credit directly from official records. The institutional returns, therefore, must be considered to be more reflective of fact than information obtained from the students. Each portion of the variable credit English course (i.e., essay, fiction, poetry, minicourse 1, minicourse 2, and independent study) is treated separately since individual students completed various components and failed to earn a grade in others. Seventy students, for example, earned credit for "essay" while 38 completed one credit under "independent study." Overall, approximately 60% (59.2) of all students across both courses (and all components)

TABLE 4

Institutional Action Related to the Academic Credit Earned by Students in Two SUPA Courses (Based Upon Institutional Responses)

Cell Count Row %	Institutional Action Credit	Exemption	Credit and Exemption	Neither	Other	Total
ENGLISH a. Essay	20 28.6	1 1.4	43 61.4	2 2.9	4 5.7	70 100.0
b. Fiction	20 30.0	1 1.5	40 59.7	2 3.0	4 5.9	67 100.0
c. Poetry	19 29.2	1 1.5	39 60.0	2 3.1	4 6.2	65 100.0
d. Mini 1	17 38.6	1 1.5	23 52.3	1 2.3	2 4.5	44 100.0
e. Mini 2	9 27.3	1 2.3	20 60.6	1 3.0	2 6.1	33 100.0
f. Independent Study	13 23.3	1 3.0	23 61.5	1 2.6	1 2.6	54 100.0
PSYCHOLOGY	20 37.0	2 3.7	32 59.3	0 0.0	0 0.0	54 100.0
Total Cases (matched)	118	7	220	9	17	371

were awarded both academic credit toward their degrees and exemptions from similar required courses. Nearly 30% (29.1) received academic credit without any kind of exemption. Three other observations can also be made:

1. Nearly all (91.1%) students received academic credit by the receiving institutions for SUPA transfer credit.
2. Institutions seldom (1.9% or 7 cases) rewarded SUPA coursework simply with exemption (without academic credit) from similar required courses.
3. The various components of the Freshman English course received similar recognition as transfer credits.

It is particularly important to note treatment of various sections of the non-traditionally structured English course. Not only are credits earned in single units with accompanying individual grades as opposed to the traditional block of 3 semester credit horus with a single grade) but one unit, the essay component, is offered only on a pass-fail basis. Successful completion of the essay portion of the course is signified by a "P" in the grade column of the transcript. Essay credit was recognized as suitable for "credit and exemption" and "credit" in approximately equal proportions to other components in the course. Treatment of the entire English course across all six components compares similarly with the recognition of the more traditional 3 credit single grade structure of the Introductory Psychology course.

The students' view of the treatment of their SUPA transfer credit is summarized in Table 5. The information reported by the students is generally consistent with the official verification by institutional officials. The biggest discrepancy is that students more frequently reported that SUPA course credit fulfilled some program requirement than apparently was the case in fact. Students indicated in 262 (70.6) cases that credit and exemption was received and in 67 (18.1%) that credit alone was awarded. This compares with 220 (59.3%) and 118 (31.8%) respectively from institutional returns for that same student group. Such differences are likely due to two reasons: 1) students really lack a clear understanding of decisions related to their transfer credit or 2) students are interpreting the word "exemption" differently from institutional officials. Students may have felt that they had been exempted from a requirement if, for example, Psychology filled an elective requirement in the social sciences area. Institutions, on the other hand, may have indicated exemption only if the Psychology course replaced another psychology course required in the program. In either case, it seems as if communications between the student transferring credit and institutional officials could be improved. This point is further reinforced by students indicating that they received only "exemption" without

TABLE 5

Institutional Action Related to the Academic Credit Earned by Students in Two SUPA Courses (Based Upon Student Responses)

Cell Count Row %	Institutional Action Credit	Exemption	Credit and Exemption	Neither	Other	Total
ENGLISH a. Essay	13 18.6	2 2.9	47 67.1	5 7.1	3 4.3	70 100.0
b. Fiction	11 16.4	2 3.0	48 71.6	3 4.5	3 4.5	67 100.0
c. Poetry	11 16.9	2 3.1	46 70.8	3 6.1	3 4.6	65 100.0
d. Mini 1	10 22.7	2 4.5	29 65.9	2 4.5	1 2.3	44 100.0
e. Mini 2	6 18.2	2 6.1	22 66.7	2 6.1	1 3.0	33 100.0
f. Independent Study	9 23.6	1 2.6	26 68.4	2 5.3	0 0.0	38 100.0
PSYCHOLOGY	7 13.0	2 3.7	44 81.5	0 0.0	1 1.9	54 100.0
Total Cases (matched)	67	13	262	17	12	371

credit or "neither credit or exemption" more often than appeared to actually be the case based upon institutional returns.

In examining institutional returns even prior to computer processing, one thing was immediately clear: colleges and universities were almost unanimously consistent internally in their treatment of students carrying SUPA credit. In other words, an institution generally rewarded the credit of two or more students in the same way. The one exception to this practice was by a large private university, it was somewhat surprising not to have observed such differences within institutions more frequently.

Summary of Findings

As evidenced by the rate of return, the methodology used in the investigation was effective in gathering information related to the transfer of SUPA credit from three groups: students who transferred credit, students who had not yet transferred credit, and post-secondary institutions receiving students with SUPA credit. The distribution of both student and institutional returns was representative across the factors considered to be significant to the objectives of the study. Among the major findings of the present investigation are the following:

1. The majority of participating institutions indicated that they have not yet developed written policy related to the transfer of college credit earned by students while they are still enrolled in high school. This is confirmed by student data.
2. Marked differences in the primary location of decision making authority related to the evaluation of transfer credit was observed among institutions of different types, kinds, and sizes.
3. The majority of institutional and student returns indicated that a student's choice of major or area of concentration would not affect the recognition of SUPA transfer credit regardless of the type, kind, and size of institution. It was found, however, that choice of major was more likely to be a factor at public institutions and at larger institutions, particularly universities.
4. Returns from institutions indicate that students are usually notified of transfer credit decisions before campus registration but after official acceptance. Some variation in such a practice was observed when institutional data was sorted by type, kind, and size, particularly among private colleges and universities.

5. Successful completion of SUPA courses was generally recognized both for fulfilling requirements in a student's academic program and as credit toward the associate or baccalaureate degrees. There was general agreement between students and institutions as to the treatment of the credit. In addition, institutions were nearly always internally consistent in their evaluation of SUPA transcripts among students and within courses.

APPENDIX

"T" Student Cover Letter 47

"T" Student Questionnaire. 48

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Institutional Questionnaire 52

"NT" Student Cover Letter 53

"NT" Student Questionnaire 54

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

PROJECT ADVANCE

December 16, 1974

Dear Project Advance student:

Last year you were among students from nine high schools in New York State participating in Project Advance. This special program allowed you to earn Syracuse University credit for college courses that were part of your regular high school program. Since one of the most important outcomes of Project Advance is college credit that we hope is easily transferable to other colleges and universities, we are asking that you spend a few minutes completing your *Credit Transfer Record* which will become part of your files. This information will be extremely valuable to students currently in the program who are thinking of applying for admission to the college you are now attending.

In behalf of all those involved in Project Advance, I'd like to thank you for your cooperation and wish you success throughout your collegiate years. Happy Holidays!

Sincerely,

Franklin P. Wilbur
Associate in Development

P.S. To bring your records up to date, please return the enclosed forms in the self-addressed envelope as soon as possible.

FPW/ks

121 COLLEGE PLACE | SYRACUSE, NEW YORK 13210 315/423-2404

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

Completed by:

PROJECT ADVANCE

Part A

1. Name of college or university now attending. _____

_____

2. Major or area of concentration. _____

_____

(Check if not yet selected ☐)

3. What degree are you working toward? (Check one)

☐ Associate ☐ Bachelors ☐ Other _____

4. When did you ask your college to make a decision about your Syracuse University Project Advance credit?

☐ Before Acceptance-- Prior to Registration ☐ After Acceptance-- Prior to Campus Registration ☐ After Acceptance-- After Campus Registration

5. When were you informed, at least tentatively, as to your college or university's decision as to the recognition of your Syracuse University Project Advance credit?

☐ Before Acceptance-- Prior to Registration ☐ After Acceptance-- Prior to Campus Registration ☐ After Acceptance-- After Campus Registration

6. Does your college or university have written policy related to their recognition of credit earned at other colleges by their entering freshmen? ☐ Yes ☐ No

7. Who informed you of the decision made at your college or university regarding credit earned in Syracuse University Project Advance?

☐ Your advisor ☐ Department Chairman ☐ Registrar's Office
☐ College Dean ☐ Admissions Office ☐ Other (specify) _____

8. Were you told that your choice of major or area of concentration affected the number of Syracuse University Project Advance credits recognized at your college or university?

☐ Yes ☐ No

9. What information, in addition to the college transcript, did your college request before making a decision on the recognition of your Syracuse University Project Advance credit?

☐ Check here if you are not aware of any.

_____

_____

10. Please feel free to add additional comments that will help us to understand any problems you may have encountered in transferring Syracuse University Project Advance credit. (Please use the back of this sheet.)

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CENTER FOR INSTRUCTIONAL DEVELOPMENT ★ SYRACUSE UNIVERSITY
121 COLLEGE PLACE 423-2404

Part B: Student Transcript Data Form

Important: Please complete your enclosed Transcript Data Form using the following procedure:

In the section of the form labeled *Institutional Action*, check only one of the five columns for each of the course grades. Foundations of Human Behavior and Communications and Society involve only one grade and the traditional three credits. Freshman English is a variable credit course involving up to six course grades. Please indicate to the best of your knowledge what action the college or university you are now attending has taken for each course grade.

1. Credit Only. Check here if you received credit toward your degree requirements, but not exemption from a similar required course.

2. Exemption Only. Check here if you received exemption from a requirement in your degree program but received no credit. If you received an exemption but were told that credit will be deferred until after completion of an advanced course, also check this column and make a note on the back of your data form to this effect.

3. Credit and Exemption. Check if both were given.

4. Neither Credit nor Exemption. Check if neither was given.

5. Other Action. If you check this column, please give a brief explanation on the back of your data form, i.e., "granting of credit or course exemption is against college policy," or "special degree requirements," etc.

6. Number of Credits Accepted. In this column, indicate the number of credits accepted by your college or university for each course or, in the case of English. each portion of the course.

7. If you are not attending the college or university indicated on the data form, please correct the information and complete the *Institutional Action* portion as requested.

8. We ask that you respond as soon as possible and forward both the questionnaire (Part A) and your transcript data form (Part B) in the return envelope provided.

Thank you again for your time and assistance.

Forward to: Franklin P. Wilbur
Associate in Development
Syracuse University
121 College Place
Syracuse, New York 13210

PROJECT ADVANCE

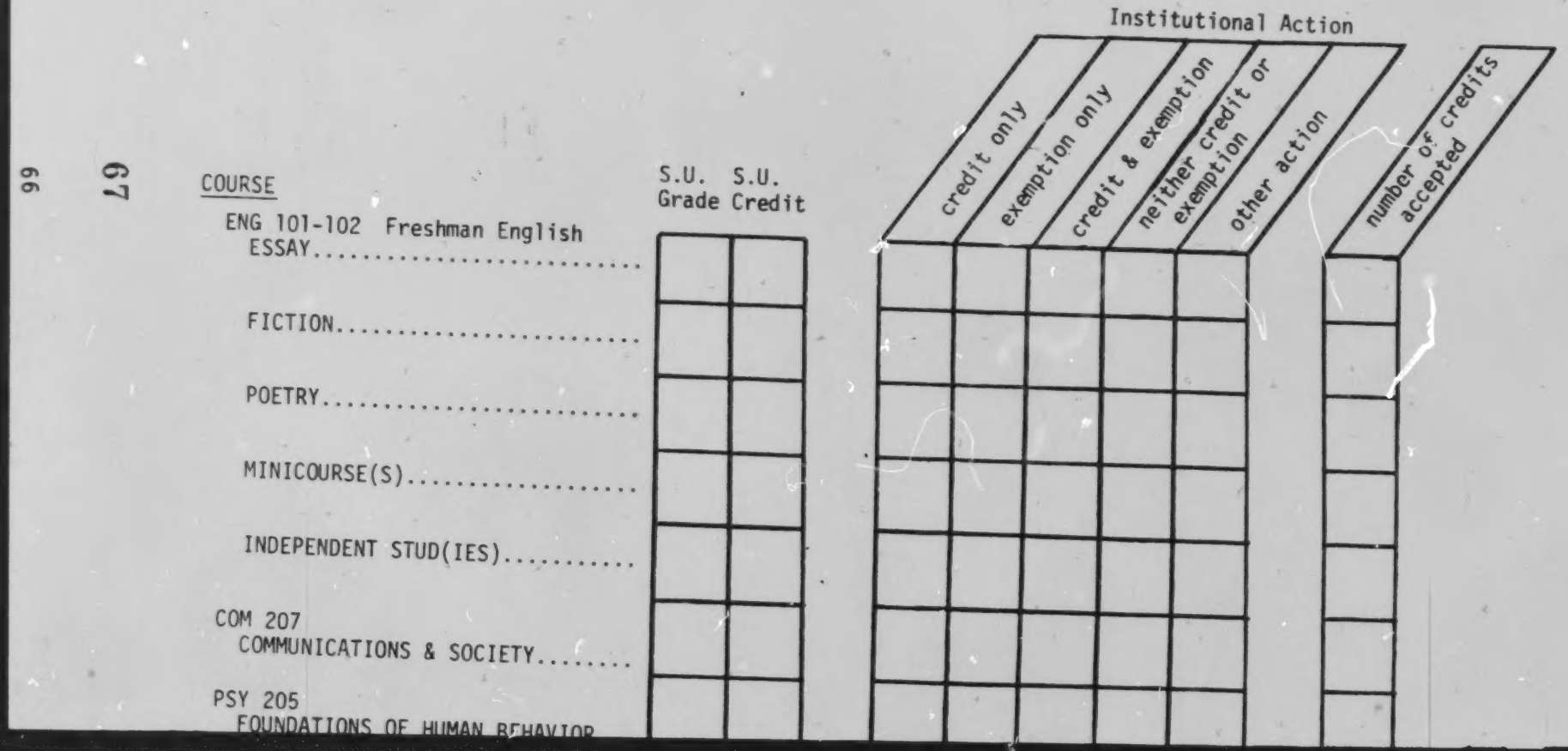
S.U.P.A. STUDENT TRANSCRIPT DATA FORM S-1

Student _____ SS# _____ High School _____
last first initial

Address _____
street city state zip code

S.U.P.A Transcript sent: Institution _____ Office/Individual _____

Address _____
street city state zip code



COURSE

ENG 101-102 Freshman English
ESSAY.....

FICTION.....

POETRY.....

MINICOURSE(S).....

INDEPENDENT STUD(IES).....

COM 207
COMMUNICATIONS & SOCIETY.....

PSY 205
FOUNDATIONS OF HUMAN BEHAVIOR

67

99

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

PROJECT ADVANCE

January 9, 1975

Dear Registrar,

Your institution has recently been engaged in evaluating college transcripts submitted by entering freshmen who have participated in Syracuse University Project Advance. Project Advance is only one such program offering high school students an opportunity to enroll in college courses prior to high school graduation. It is of critical importance to Syracuse University and participating high schools to know how credit earned in the program has been recognized and rewarded at your institution. We ask you to please assist us in assuring that the enclosed questionnaire and student records are completed and returned as soon as possible. Please read the entire questionnaire carefully. If your office does not have all the information requested on each student, kindly contact the appropriate department.

Like Syracuse University, your institution may be cooperating with area high schools to create opportunities that represent new and more effective transitions between high school and college. Since the "high school student with college credit" doesn't necessarily fall into the usual category of "transfer student" (i.e., student from another 2 year or 4 year post-secondary institution), we think it a particularly important responsibility to see how these students fared.

The return of this data is extremely important, and we appreciate your time. Feel free to enclose additional comments of statements of policy to assist us in better understanding how transfer credit of entering freshmen is evaluated at your institution.

Sincerely,

Franklin P. Wilbur
Associate in Development

FPW/ks

121 COLLEGE PLACE | SYRACUSE, NEW YORK 13210 315/423-2404

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

PROJECT ADVANCE

Completed by:

Name of Institution _____

Institution's Address _____

_____

Person completing forms (Dr., Mr., Ms.) _____
first last

Title _____

Telephone _____

Part A (Please check appropriate category)

1. Type of institution: ☐ 2-year college ☐ 4-year college ☐ university
2. Kind of institution: ☐ private ☐ public
3. Size of undergraduate population:
   ☐ under 1000 ☐ 1000-2000 ☐ 2000-5000 ☐ 500C 10,000 ☐ 10,000+
4. Highest degree granted:
   ☐ associate ☐ baccalaureate ☐ masters ☐ doctorate ☐ (other) _____
5. With increasing frequency, high school students, prior to graduation, are accumulating college credit through various arrangements with colleges and universities. Does your institution have written policy that would apply to the recognition of such college credit earned by members of your entering freshman class?
   ☐ yes ☐ no
6. Where are decisions regarding transfer credit for these entering freshmen usually made?
   ☐ student's advisor ☐ academic department chairman ☐ registrar's office
   ☐ college dean ☐ admissions office ☐ other (specify) _____
7. When does your institution inform entering freshmen of decisions (tentative or otherwise) regarding recognition of their college transfer credit?
   ☐ before acceptance-- prior to registration ☐ after acceptance-- prior to campus registration ☐ after acceptance-- after campus registration
8. Would a freshman student's choice of major or area of concentration possibly affect transfer credit recognition at your institution?
   ☐ yes ☐ no
9. Please feel free to add additional comments that will help us understand how transfer credit of entering freshmen is evaluated at your institution, concerns that you or others may have regarding school-college articulation programs, etc. (please use the back of this sheet).

121 COLLEGE PLACE | SYRACUSE NEW YORK 13210 315/423-2404

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

PROJECT ADVANCE

December 16, 1974

Dear Project Advance student:

Last year you were among students from nine high schools in New York State participating in Project Advance. This special program allowed you to earn Syracuse University credit for college courses that were part of your regular high school program. For many reasons, you may or may not have decided to have this credit transferred to other colleges and universities. In order to determine how credit earned in the program was used, we ask that you spend a few minutes to fill out the enclosed form and return it in the self-addressed stamped envelope provided. This information will be extremely valuable in helping all those participating in Project Advance understand the variety of ways in which credit earned in the program has benefited the student or why the credit was not transferred to other institutions.

In behalf of all those involved in Project Advance, I'd like to thank you for your cooperation. Happy Holidays!

Sincerely,

Franklin P. Wilbur
Associate in Development

121 COLLEGE PLACE | SYRACUSE, NEW YORK 13210 315/423-2404

SYRACUSE UNIVERSITY CENTER FOR INSTRUCTIONAL DEVELOPMENT

PROJECT ADVANCE

Completed by:

Check the appropriate category or supply the information requested.

1. Are you now attending a college, university, or professional school?

   ☐ Yes ☐ No

   If yes, what is the name of the school you are now attending? _____

2. Did you have Syracuse University Project Advance credit transferred to another school or college?

   ☐ Yes ☐ No

   If yes, where? _____

   If no, why not?

   ☐ College said they would not accept the credit so I didn't bother to request credit transfer.

   ☐ I decided not to enroll in any school or college.

   ☐ I didn't know I was supposed to request a Syracuse University transcript.

   ☐ Other. (Explain) _____

   _____

3. If you enrolled at a college or university and decided not to transfer Project Advance credit, please indicate why not.

   ☐ My grade(s) in Project Advance were too low to transfer.

   ☐ I decided that I would benefit by repeating a similar college course(s) as a college freshman.

   ☐ Other. (Explain) _____

   _____

4. If you found that Syracuse University Project Advance credit was not acceptable at another institution, how did you discover this?

   ☐ College catalogue ☐ Letter from institution
   ☐ Visit to institution ☐ Speaking with institutional representative
   ☐ Other _____

   _____

5. Please feel free to add additional comments that will help us to understand any problems you may have encountered in transferring or attempting to transfer Syracuse University Project Advance credit (use back of sheet).

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DOES PARTICIPATION IN A PROJECT ADVANCE COURSE AFFECT A STUDENT'S ABILITY TO DO WELL IN COLLEGE? A FOLLOW-UP OF 1973-74 PROJECT ADVANCE STUDENTS

David Chapman

Follow-up of Project Advance Students' College Experience

Does participation in a Project Advance course affect a student's ability to do well in college? How do students who participated in Project Advance and who then go on to college evaluate their experience(s) in Project Advance courses? The students who would know best are those who had participated in Project Advance during its first year, 1973-74, and gone on to college.

During November, 1974, these students were contacted by mail and asked to complete a short questionnaire. Of the 277 correctly addressed questionnaires that were mailed, 140 were returned, a 50% rate of response. The questions were designed to collect three types of information: 1) students' achievement in college, 2) the influence of Project Advance on students' ability to manage their time and develop good study habits, 3) their overall ratings of Project Advance from their perspective as college students, and 4) their comments and suggestions regarding the Project Advance course(s) they had taken.

The first three types of information are summarized separately for students who had been enrolled in English, in Psychology, and in other Project Advance courses (Communications in Society and Human Values). Part four, student comments, form the last portion of this report.

Students Enrolled in Project Advance English

Grade Point Average at end of freshman year

	N	Grade Average
Students enrolled in P.A. English only	65	2.89
Students enrolled in P.A. English and another P.A. course	12	3.08
Overall average	77	3.00

My experience in a Project Advance course was _____ preparation for more advanced courses in the same area.

fantastic, excellent (2), very good (3), good (37), helpful, pretty good, average, decent, okay, fair (7), suitable, not so good, poor (5), useless, can't answer; haven't taken other English courses (7).

My experience in Project Advance was _____ preparation for most of the work I took during my freshman year.

very good/excellent (6), good (26), great, valuable, fine, helpful (2), adequate, satisfactory, okay, fair (8), poor (3), inadequate, bad (3), useless, irrelevant, no effect.

It helped me to learn to manage my time.	Number of Students
a great deal	8
some	40
a little	22
not at all	18

It helped me develop good study habits.

a great deal	6
some	45
a little	20
not at all	17

On the basis of my experience in Project Advance I would recommend _____.

the course but not the teacher	14
the teacher but not the course	1
the course and the teacher	54
neither the course nor the teacher	3

Overall, I rate my experience in a Project Advance course to be _____.

excellent	26
good	52
fair	9
poor	3

Do you think that as a result of participation in Project Advance, you may complete your degree program sooner?

yes	14
no	75

Students Enrolled in Project Advance Psychology

Grade Point Average at end of freshman year

	N	Grade Average
Students enrolled in P.A. Psychology only	50	3.01
Students enrolled in P.A. Psychology and another P.A. course	12	3.08
Overall college freshman GPA respondents who took P.A. Psychology	66	3.02

My experience in Project Advance course was a _____ preparation for more advanced courses in the same subject area.

excellent (9), very good (4), great, good (30), okay, fair (4), suitable, decent, small, poor (4), didn't take psychology at college (5).

My experience in a Project Advance course was a(n) _____ preparation for most of the course work I took during my freshman year.

excellent (3), good (18), solid, worthwhile, adequate, identical, fair (7), satisfactory, all right, okay (2), average, general, inappropriate, not related to, no effect, not needed.

It helped me to learn to manage my time.

a great deal	9
some	36
a little	13
not at all	12

It helped me develop good study habits.

a great deal	9
some	36
a little	16
not at all	9

On the basis of my experience in Project Advance, I would recommend _____.

the course but not the teacher	7
the teacher but not the course	1
the course and the teacher	61
neither the course nor the teacher	0

Overall, I rate my experience in a Project Advance course to be _____.

excellent	27
good	38
fair	5
poor	0

Do you think that as a result of participation in Project Advance, you may complete your degree program sooner?

yes	20
no	50

Only 4 responses were available from students who had been enrolled in Communication and Society or Human Values. These were summarized together.

Grade Point Average at end of freshman year 3.15

My experience in a Project Advance course was a _____ preparation for more advanced courses in the same subject area.

excellent, good (2), identical

My experience in a Project Advance course was a(n) _____ preparation for most of the course work I took during my freshman year.

excellent, good (2), identical

It helped me learn to manage my time.

a great deal	2
some	2
a little	0
not at all	0

It helped me develop good study habits.

a great deal	3
some	1
a little	0
not at all	0

On the basis of my experience in Project Advance, I would recommend _____.

the course but not the teacher	0
the teacher but not the course	0
the course and the teacher	3
neither the course nor the teacher	0

Overall, I rate my experience in a Project Advance course to be _____.

excellent	2
good	2
fair	0
poor	0

Do you think that as a result of participation in Project Advance, you may complete your degree program sooner?

yes	2
no	2

STUDENT COMMENTS

Since college studies are so different from those in high school, project advance proved to be an enlightening experience. It gave me some ideas as to what to expect upon entering college.

If I hadn't taken it, I would be at a disadvantage because my High School didn't prepare people in the English studies. And also, I had a credit jump which allowed me to take another course freshmen wouldn't normally take.

I'm really glad that I had the opportunity to participate in Project Advance. At the time that the classes were being taught, I thought that some of the things we were doing were a bit ridiculous, but now, I'm thankful for everything we did. It (Project Advance) has helped me prepare for classes in the same subject area.

The course wasn't demanding enough to push me into any work that was really good. The only benefit of the entire course was a greater familiarity with library resources - other than that, there was very little in the course that taught me anything.

I didn't feel that project advance made college life easier for me. However it did give an idea of what to expect in college.

I enjoyed the course and can honestly say that it helped my writing skills. It did not affect my study habits because it was taught in a high school atmosphere and I find it completely different being in college. I was also disappointed to find that the course was not required by my major.

I hate to condemn the whole project advance course just because of my personal experience, I saw many students succeed and work very hard in it. However, I was very dissatisfied myself. In high - school I was not ready to give up an hour or so everynight to English. At the time I felt the course was very difficult and looking back I see it was not representative at all of any courses I have taken so far at school.

Project Advance English exempted me from Introductory Freshman English and the associated drudgery of Paradise Lost.

Learning how to write well, and in a limited amount of time, helped me greatly in taking tests in college (essays). Anyone who is going to go to college should learn how to write correctly before they get there. I definitely recommend this course also for people who aren't going to go to college because it helps you to organize your thoughts, and to express yourself more clearly and effectively.

I feel it was a worthwhile course but I don't feel that it made any difference in my college career. I don't feel that it helped my preparation at all.

I took the English course for my own benefit - no other reason. Throughout my high school english courses (or any others), I never learned how to write a good essay or paper. I am a biology major and I have done little essay or paper writing, but I found that when I had to write one - it was fairly easy to tackle it. I used to be nervous and dread writing one - now I can collect my thoughts and write a very good paper and enjoy it.

As can be seen by my records, my grades received were not very high (about a C). I do feel however that this is due mostly to my own negligence of the work assigned. I'm sure that I could have done much better had I worked to my full capacity. The experience was rewarding, academically and economically.

At first I was hesitant in taking Project Advance courses because I didn't want a heavy senior year and figured that I would accumulate enough credits in college itself. But I did take 2 courses and I will never forget the good that came out of it. I learned a lot about the amount of time and effort needed to result in a good grade. It put me 9 credits ahead and lessened my electives load which might lead to me graduating a semester early. In all, it was an excellent experience prior to college, gave me a good insight into college courses, and I will never regret taking either course.

Personally I found no influence on my college experience, however I found taking freshman English in high school to be very beneficial as it was one less course I had to worry about during my first semester as a freshman.

I wish at the time that I had taken the psychology course more seriously. I obtained a C in the course but I wish now that I'd realized that the course was just as good as if it were taken right at S.U..

Project Advance helped me get into the more important psychology courses before most of my friends. As Project Advance classes are smaller in comparison to the University's huge introductory courses, I feel that I was able to learn more in a better atmosphere.

It was a great help and was a good experience in high school and a better realization of what some college work load will be like.

I would say that it was an easy way to obtain college credit.

Students who successfully completed Project Advance courses in high schools during 1973-74 and who then went on to college had an average of 3.0 (B) at the end of their freshman year. Slightly more than half of the students responding felt the course had provided a good preparation for more advanced courses in the area of their Project Advance course and about the same number felt their Project Advance course(s) provided a good preparation for most of the work they took during their freshman year in college. More specifically, 54 percent of the students who had taken Project Advance English felt the course had helped them learn to manage their time and 57 percent felt the course had helped them develop good study habits "some" or "a great deal." Ninety-four percent of these college sophomores would still recommend the course and 75 percent would also recommend their same teacher. Fifteen percent of the respondents thought that as a result of their participation in Project Advance, they might complete their degree program sooner.

While only four students who had been enrolled in Communications in Society or Human Values, all were very positive about the course, and their experience in the course. Two of them felt their participation in Project Advance might shorten their time in college.

Summary

Students who successfully completed Project Advance courses in high school during 1973-74 by mail and asked to complete a questionnaire regarding their experiences in college and the influence of Project Advance on those experiences.

Project Advance students responding to this questionnaire averaged a 3.0 (B average) at the end of their sophomore year. Slightly over half of the students felt their experience in a Project Advance course helped them learn to manage their time and develop good study habits. Their overall rating of their Project Advance course(s) was overwhelmingly positive. The vast majority of the students would still recommend both the course(s) they took and their teacher(s). About 20 percent of the students expected that as a result of their participation in a Project Advance course they might complete their degree program sooner.

APPENDIX B

Questionnaire Sent to College Students Who Had Completed Project Advance Courses in 1973-74

PROJECT ADVANCE

As one of the first group of Project Advance students, you are in a unique position to tell us how Project Advance has affected your college work and how the Project Advance courses might be improved. Please answer the questions below and return the sheet in the enclosed, stamped envelope.

Name _____ College Attending _____

I was enrolled in Project Advance

☐ English ☐ Psychology ☐ Human Values

1. Grade Point Average at the end of freshman year. _____

2. My experience in a Project Advance course was a _____ preparation for more advanced courses in the same subject area.

3. My experience in a Project Advance course was a(n) _____ preparation for most of the course work I took during my freshman year.

4. It helped me learn to manage my time _____.

   a) a great deal b) some c) a little d) not at all

5. It helped me develop good study habits _____.

   a) a great deal b) some c) a little d) not at all

6. On the basis of my experience in Project Advance, I would recommend _____.

   a) the course but not the teacher
   b) the teacher but not the course
   c) the course and the teacher
   d) neither the course nor the teacher

7. Overall, I rate my experience in a Project Advance course to be _____.

   a) excellent b) good c) fair d) poor

8. Do you think that as a result of participation in Project Advance, you may complete your degree program sooner?

   a) yes b) no

9. Any comments or suggestions which you wish to make regarding Project Advance courses or their influence on your college experience will be appreciated.

PROJECT ADVANCE STUDENTS' EXPECTATIONS OF COLLEGE

A Comparison of Project Advance Students Coming To Syracuse University with Other Syracuse University Freshmen Using the College Characteristics Index

Bonnie Baranowski
David Chapman

College Expectations of Entering Freshmen Who Took College Courses During High School

Considerable research has investigated students' expectations of college. Work by Stern (1970) indicates that many students enter college with unrealistic expectations of the college environment, a phenomenon he refers to as the "freshman myth." College-bound high school seniors, regardless of the institution they expect to attend, share a highly stereotyped, idealized image of college life, an image not representative of any actual institution. Writes Stern:

> . . .[Students] are badly misinformed about the extent to which their college is organized rationally to achieve its various ends, expecting it to be a lot more consistent than any college in fact is. And they are even more poorly informed about the composite character of the school. They think that it is prepared to do as much toward the shaping of their social lives as it will do for their intellects, whereas in fact, no school combines these attributes. (1970, p. 173)

The research is not clear as to the sources of these unrealistic expectations. The students themselves report that they get their information from friends, family, and high school counselors (McLaughlin, 1966; Stern, 1970; Tillery, 1973). It seems likely that these groups all tend to idealize college life. Whatever the source(s) of their expectations, their myths about college life may serve as a source of considerable tension and frustration as they discover that their college does not and cannot meet their idealized expectations.

Perhaps if students are provided with more exposure to college experiences before their matriculation, they will hold more realistic expectations of college life. One type of college experience increasingly available to high school students is the opportunity to take college courses during high school. Many colleges and universities across the country are presently involved in some form of high school-college cooperation that offers this possibility (Wilbur, 1975; Chapman and Wilbur, 1976). However, little research has examined if or how these particular course experiences influence students' expectations of college. It seems reasonable, however, that as high school students take college courses in which college standards are maintained, students will develop expectations about themselves and about college more consistent with what they will actually experience in college.

Do students who take college courses during high school hold more accurate expectations of college than other college-bound students? The present study investigated this question for one particular program, Project Advance. Project Advance is a program that offers selected Syracuse University courses in participating high schools in New York and surrounding states. Courses are taught in New York high schools by qualified high school teachers under the supervision of University faculty. The courses are regular University courses, and considerable evidence is available that college standards are indeed being maintained (Chapman et al.,1976).

In particular, this study used the College Characteristics Index (CCI) (Stern, 1958, 1970) to investigate, first, whether the college expectations of students taking Project Advance courses and then coming to Syracuse University as freshmen differed from those of other freshmen entering Syracuse University, and whether that difference was in the direction of more realistic expectations on the part of the Project Advance group. One would expect that participation in a Project Advance course would lead to more "accurate" expectations of the academic and/or intellectual climate but have little influence on expectations of the social environment of the college. Accuracy is defined in the present study as expectations closer to the perceptions of upperclassmen.

Most of the previous research using the CCI has focused on need-press congruence and achievement or attrition. An excellent review of this literature is provided by Walsh (1973). However, students' adaptation to and success in college may be less influenced by the congruence of their needs and the institutional press than by the consequence of their expectations and the press they subsequently encounter (Lauterbach and Vielhaber, 1966). Standing and Parker (1964) hypothesized that the degree of disparity between the anticipated environment and the actual environment would relate to achievement, satisfaction with school, and persistence at the university. However, their results regarding the relationship between inaccurate preconceptions and achievement were inconclusive, and no significant differences were found between the preconceptions of students who dropped out and those who did not. On the other hand, Lauterbach and Vielhaber (1966), using the CCI with West Point Cadets, found that accuracy of cadets' expectations were significantly related to academic achievements as indicated by end of the year GPA. However, the expectation-press measure did not appreciably aid in the prediction of grades over other indicators already available (i.e., SAT-V, SAT-M, high school rank in class). More recently Dresser (1971), using the CCI to study student attrition at Syracuse University, found that environmental expectations were significantly related to student dropout.

Methodolgy

Procedure. During the summer of 1975, as a part of the freshman orientation program at Syracuse University, entering students were asked to complete the short form of the CCI. Responses had already been collected for college students enrolled in the College of Arts and Sciences at Syracuse University who completed the items as part of another study (Woodstruck, in preparation).

Instrumentation. The CCI was developed by Stern (1958, 1970) as a measure of student perception of the college environment. The instrument consists of a series of items (110 on the short form; 300 on the long form) which describe possible characteristics of a college. Respondents rate (agree or disagree) each item on the basis of their belief that the item describes something that is or is not likely to occur at their college. These items compose eleven College Environment Factors which are reported in Figure 1 and described in earlier work by Stern (1970).

Sample. A total of 2039 entering freshmen completed the CCI. Of these, 54 had completed one or more Project Advance courses during their senior year in high school. The college sample consisted of 377 students from all four classes enrolled in the College of Arts and Sciences at Syracuse University who completed the CCI during the spring of 1973. In the present study, they will be referred to as "upperclassmen."

Data Analysis. The data analysis was conducted in two parts. The first used discriminant analysis to determine if entering freshmen differed from upperclassmen across the eleven factors of the CCI, that is, whether or not the freshman myth existed in the entering students. Part two used discriminant analysis to compare the college expectations of Project Advance students (PA) with those of other entering freshmen (NPA). Discriminant analysis is a multivariate multigroup technique that answers the questions, "What combinations of scales best separates (i.e., discriminates) different groups"? Discriminant analysis was selected as the analytic technique because the eleven factors of the CCI show a substantial intercorrelation. Both analyses were completed using SPSS version 6.3.

Results

Means and standard deviations for each group on each factor are reported in Table 1.

1.	Aspiration Level	Counteraction, Change, Fantasied Achievement, Understanding
2.	Intellectual Climate	Reflectiveness, Humanities-Social Sciences, Sensuality, Understanding, Fantasied Achievement
3.	Student Dignity	Objectivity, Assurance, Tolerance
4.	Academic Climate	Humanities-Social Sciences, Science
5.	Academic Achievement	Achievement, Energy, Understanding, Counteraction, Conjunctivity
6.	Self-Expression	Ego Achievement, Emotionality, Exhibitionism, Energy
7.	Group Life	Affiliation, Supplication, Nurturance, Adaptiveness
8.	Academic Organization	Blame Avoidance, Order, Conjunctivity, Deliberation, Deference, Narcissism
9.	Social Form	Narcissism, Nurturance, Adaptiveness, Dominance, Play
10.	Play	Sexuality, Risk-taking, Play, Impulsiveness
11.	Vocational Climate	Practicalness, Puritanism, Deference, Order, Adaptiveness

Figure 1 First-Order College Environment Factors (CCI)

Source: G.G. Stern. People in Context, New York: Wiley and Sons, Inc., 1970, p. 56-58.

TABLE 1

Means and Standard Deviatiations for Upperclass, Project Advance, and Non-Project Advance Students for Eleven College Environment Factors of the CCI

	Upperclassmen		Freshmen			
			PA		NPA	
	$\bar{x}$	Sx	$\bar{x}$	Sx	$\bar{x}$	Sx
Aspiration Level	4.711	1.567	6.537	1.798	6.711	1.912
Intellectual Climate	4.722	1.537	7.519	1.959	7.583	2.047
Student Dignity	5.021	1.564	7.241	1.952	7.645	1.782
Academic Climate	5.589	1.690	7.500	1.950	7.369	1.905
Academic Achievement	5.637	2.092	6.944	2.269	7.369	1.905
Self-Expression	5.597	1.684	7.759	1.852	7.865	1.970
Group Life	6.088	1.647	6.519	2.313	8.016	1.826
Academic Organization	7.305	1.566	4.574	1.849	5.000	2.177
Social Form	5.658	1.678	6.019	1.754	6.175	1.844
Play-Work	3.446	1.529	8.093	1.674	7.923	1.596
Vocational Climate	6.737	1.585	5.111	1.839	5.464	1.824

TABLE 2

Stepwise Selections of Variables for Discriminant Analysis of CCI for Entering Freshmen and Upperclassmen

Step	Variable	F to Enter	Lambda	ROA's V	Change in ROA's V	Significance of Change	Standardized Discriminant Function Coefficients
1	Academic Achievement	386.02	.86	386.01	386.01	.01	-.16
2	Play-Work	2181.95	.45	2917.92	2531.91	.01	-.21
3	Academic Organization	274.38	.41	3524.48	606.56	.01	-.15
4	Student Dignity	169.13	.38	3941.09	416.61	.01	.07
5	Intellectual Climate	105.14	.36	4218.34	277.24	.01	.32
6	Social Form	58.90	.36	4380.48	162.14	.01	-.21
7	Vocational Climate	64.31	.35	4561.94	181.46	.01	-.47
8	Group Life	14.05	.34	4602.72	40.78	.001	.14

TABLE 3

Centroids of Groups in Discriminant Space for Entering Freshmen and Upperclassmen

Group	Function
Freshmen	-0.35
Upperclassmen	1.88

TABLE 4

Predicted Classification of Entering Freshmen and Upperclass Students

Actual Group	Predicted Entering Freshmen	Predicted Upperclass Students
Entering Freshmen (N = 2039)	1907 (93.5%)	132 (6.5%)
Upperclass Students (N = 377)	9 (2.4%)	368 (97.6%)

Analysis 1. Results of the first discriminant analysis indicated a multivariate F ratio of 573.67 with 8 and 2407 degrees of freedom, significant at the .001 level. Eight of the eleven variables entered the analysis with an F to enter $\geq$ 1.0 (Table 2). The discriminant analysis had a chi square value of 2571.59, significant at the .01 level. An examination of the standardized discriminant function coefficients for this function indicates that Play-Work, Academic Organization, Student Dignity, and Social Form factors contribute most to defining this function. Entering freshmen had higher expectations of Play-Work, Student Dignity, and Social Form than were the perceptions of upperclassmen, while upperclassmen had much higher perceptions of the Academic Organization of college than was expected by entering students. The centroids of each group in discriminant space are reported in Table 3.

A high score on the Play-Work dimension describes an expectation of a lot of informal dating and frequent student parties. The Student Dignity factor seems to reflect an administrative concern for the maintenance of a high level of self-determination and personal responsibility among students (Stern, 1970). A high score here indicates an expectation (or perception) that the institutional climate is non-authoritarian and that there is a minimum of coercion, that students are treated with the respect and consideration accorded mature adults Social Form describes an institutional press for the development of social skills. A high score describes an expectation that participation and appropriate manners are important in college. Freshmen were lower than upperclassmen in their expectation of the Academic Organization factor. This dimension refers to the emphasis a college places on organization and structure in the academic environment. Overall, entering freshmen seemed to expect far more social activity to be available and to find more emphasis on appropriate participation in that activity than did students already in college. At the same time, they expected less emphasis in the organization of the academic aspects of college. These findings are consistent with those of Stern (1970). A classification analysis performed on the combined data for entering freshmen and upperclassmen indicated that 94.16% of the 2416 students could be correctly classified (Table 4). Since prior probability was only 75%, knowledge of a student's expectations/perceptions of college increases the probability of judging correctly whether he/she had college experience by over 19.16 percent.

Analysis 2. Results of the second discriminant analysis showed a multivariate F ratio of 4.44 with 4 and 2034 degrees of freedom, significant at the .01 level. Four of the eleven variables entered the analysis with an F to enter $\geq$ 1.0 (Table 5). This discriminant analysis had a chi square value of 17.70, significant at the .001 level. An examination of the standardized discriminant function coefficients indicates that the function is defined primarily by the Academic Achievement factor with a moderate contribution from the Self-Expression and Academic Climate factors. The Academic Achievement factor refers to students' expectations of the academic standards and intellectual rigor of the institution and the quality of instruction and learning that students expect to find. Students high on this measure feel that competition for grades will be intense and that faculty will push students to their full capabilities. Students who have taken college courses in high school are less imbued with these beliefs. The Self-Expression factor is concerned with opportunities offered to the students for the development of leadership potential and self-assurance. Again, PA students have a lower score than the NPA group. Academic Climate refers to the academic excellence in staff and facilities in the conventional areas of the humanities, social science, and natural sciences. A high score on this factor would indicate the presence of good facilities such as libraries and laboratories. PA students hold higher expectations along both of these factors than do NPA students. Overall, the function might be termed an Academic Achievement function with PA students expecting a lower institutional press for academic achievement and a somewhat higher press for self-expression and better academic facilities than do NPA students. The centroids of PA and NPA students in discriminant space are reported in Table 6. A classification analysis showed no increase in the ability to classify students into their original groups (PA or NPA) on the basis of their scores on this function. This is probably due to the very small proportion of PA students to the overall group (less than 3%). While groups differed significantly, the differences are not sufficient to allow the classification of individuals.

Discussion

Results of the present study of students coming to Syracuse University indicate that, overall, entering freshmen have unrealistic and idealized expectations of college life, consistent with what Stern (1970) describes as the freshman myth. However, students who had taken college courses during high school

TABLE 5

Stepwise Selection of Variables for Discriminant Ananlysis of CCI for Project Advance and Non Project Advance Students

Step	Variable	F to Enter	Wilks Lambda	ROA's V	Change in ROA's V	Significance of Change	Standardized Discriminant Function Coefficient
1	Academic Achievement	11.39	.99	11.37	11.37	.001	-.44
2	Academic Climate	3.86	.99	15.26	3.89	.048	1.18
3	Self Expression	1.33	.99	16.60	1.33	.249	-.49
4	Group Life	1.18	.99	17.78	1.18	.277	.30

TABLE 6

Centroids of Groups in Discriminant Space for PA and NPA Students

Group	Function
Project Advance Students	-.56
Non Project Advance Students	.02

through Project Advance differed significantly from the other entering freshmen and appeared closer to upperclassmen in their expectations of academic and intellectual aspects of college. PA students did not differ significantly from other freshmen in their expectations of the social or personal aspects of college life. Still, PA student scores were in the direction of the upperclassmen's perceptions on the majority of the dimensions of the CCI.

It is interesting that significant differences were found on a function defined primarily by Academic Achievement, the dimension most directly related to the classroom experience. The rigor of college level work appeared somewhat less mythicized to the PA group. This may merely reflect a greater confidence among these students that they have the necessary skills and can meet the challenge of college work. Indeed, this would be consistent with results of an earlier study of PA students who had gone on to college in which over half of the respondents indicated that their experience in Project Advance courses helped them learn to manage their time and develop good study habits (Chapman, 1976).

An alternative explanation is that the more accurate college expectations of the Project Advance group were due to their experience with a college course itself. The reader should be cautious, because correlation does not denote causality; one cannot conclude from this study that taking Project Advance courses "caused" the greater accuracy of expectations. Still, it is a reasonable speculation. The speculation is supported by the greatest differences observed on those dimensions most directly related to classroom activities, the experience on which PA and NPA students most clearly differed. Perhaps the first-hand exposure to college level work leads to more accurate expectations of college in general and of the academic aspects of college in particular. One can speculate that the more accurate expectations would reduce students' initial frustration and tension of adapting to college life and would, in turn, contribute to their success as college students.

The theoretical basis for relating expectations of courses to expectations of college in general is cloudy at best. Calista (1975) has pointed out that little differentiation is made between generalized institutional expectations and those associated with a student's actual courses. He speculates that students can be unrealistic about their situational (college) expectations but be quite realistic about their contextual (course) expectations. Results of the present study suggest that the two may be more closely related and that course experiences may be important contributions to generalized expectations. This area deserves more study.

Is it reasonable that one, maybe two, college courses taken during high school could have sufficient impact to be related to the differences in expectations? Probably so. Previous studies indicate that by the sixth week of the freshman year, the idealized image of college life described earlier as the freshman myth disappears, and students develop a more realistic perception of the environment (Stern, 1970). Stafford (1970) has found that the freshmen perceive the school no differently from other students by the end of the first semester. The freshman myth is dispelled quickly. Perhaps PA students are closer in some respects to being second semester freshmen in terms of their classroom experience.

A third possibility should be considered. As mentioned earlier, Dresser (1971) found that environmental expectations were significantly related to student attrition at Syracuse, However, "in terms of press expectations, those who left Syracuse appear to have expected less of an Intellectual or Academic Climate, lower levels of Academic Achievement and fewer opportunities for Self Expression than those who stayed." He further noted that these students tended to have high intellectual needs. Hence, while their expectations were closer to reality (that is, the the perceived press) than the high expectations associated with the freshman myth, these were incongruent with personal needs. Possibly the lower Academic Achievement scores of the PA students foreshadows a problem with perseverance in college. It should be noted, however, that the PA students in the present study, while lower than NPA students on Academic Achievement, were higher on Academic Climate and Self Expression. They do not fit into the pattern described by Dresser. Further research should investigate whether students who take college courses during high school differ in their personality from other college-bound students, particularly in the area of achievement and/or motivation.

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THE ENROLLMENT AND DISTRIBUTION OF GRADES AND COLLEGE CREDITS EARNED BY PROJECT ADVANCE STUDENTS, 1974-75

RICHARD HOLLOWAY

It is the intent of this first report to present student enrollment and the distribution of grades for Project Advance in the academic year 1974-75

Enrollment

Enrollment blossomed in this, the second year of the Project's operation. The overall enrollment figures quadrupled from 462 in the 1973-74 academic year to 1865 in 1974-75. This increase is reflective not only of a four-fold increase in the number of participating schools, but a substantial increase within schools. Both kinds of growth are important to Project Advance; however, growth within a school is a powerful indicator of the acceptance of the program by the school and its students. This may serve to demonstrate confidence in Project Advance both before and after its implementation in schools. A summary of enrollment by course is presented in Table 1.

Achievement

The second area of interest is that of student achievement represented as the numbers and distributions of student grades. This allows the reader to get an idea of what students' performance was like for the academic year. For our purposes we may say that the distribution of student grades represents an even more specific data set than many traditional grade distribution reports. The courses offered by Project Advance are systematically developed and monitored. Therefore, given the breadth of application to numerous settings throughout the state, two major observations may be made. (1) Grades are reflective of a student's progress at his own rate through courses designed to monitor his progress at regular intervals. (2) Grades may demonstrate the consistency with which courses were offered in the many different settings. This allows a graphic and comprehensive statement of comparison across all schools and all courses.

Quality points are a standard indicator for college and universities as a way of reporting student achievement. A quality point is the number of credit hours times the number assigned to each grade (A = 4, B = 3, C = 2, D = 1). This is a workable format for Project Advance because of the variable credit arrangements of many of the courses. The quality point affords a standard measure by which all courses may be compared. Future reports will use this mode as well.

Summaries of quality points generated for each course are presented in Table 2. Figure 1 shows graphically the quality point distribution across courses for all schools. This illustrates clearly, for instance, the difference in design approach between English and Psychology. Most beneficial is the

illustration of the relative size of the participating courses and their distributions.

There are other terms that most institutional researchers use such as "FTE," "credits," "semester hours," etc. which for the large part do not apply to the Project Advance course division summaries. However, for the sake of comparability, some of these terms will be used, occasionally in modified forms. "FTE" is a term meaning "full-time equivalency" and usually refers to the grouping of credit hours by "full-time" blocks, usually 12 credit hours in undergraduate institutions. Since Project Advance is not a degree-offering program, the term will not be used except to designate student enrollments. "Credits" and "semester hours" are used interchangeably to designate the number of units of study assigned to a course. Technically, a credit hour is equivalent to one hour of instruction per week for fourteen weeks. Most courses are three credit hours per semester or the equivalent of three hours of instruction per week for fourteen weeks.

The following sections discuss, by course, the enrollment and grading patterns of Project Advance for the 1974-75 academic year.

English 101-102

Freshman English is divided into six credits, earned in sequence. English 101, the study of composition, consists of the writing of argumentative essays (essay unit--one credit, pass-fail), the critique of short fiction (fiction unit--one credit, letter grade assignment), and the critique of poetry (poetry unit--one credit, letter grade assignment). Participation in the two latter units is contingent upon a passing grade in the essay unit. Therefore (and because the course is self-paced), there is usually some attrition after the essay component. This, as well as the distribution of scores on the units, is displayed in Table 3. English 102, the study of literature, is composed of minicourses (designed by each school in conjunction with the Project Advance staff) and independent research papers (Independent Study). For the 1974-75 year, each of these components was offered as a single credit option in the combination of one minicourse-two independent study units or two minicourses-one independent study unit.

Table 4 (A, B, and C) is a breakdown by school of each of the one-credit units in English 101. Since these units are uniform throughout Project Advance, it is interesting to compare schools with regard to their grade patterns. Note that there is a slight attrition rate from the essay to the fiction to the poetry unit. Students have the option of completing only those units they choose to complete. Therefore, some students stopped after the essay or fiction units.

It is interesting to note that smaller sections generally had no lower drop rates than larger ones. It is not clear to what this phenomenon should be attributed.

Psychology 205

The Psychology course, although complex in internal design, has as its outcome one final grade reflecting three credit hours of college study. Distributions of grades for each school are shown in Table 5. Compared with some other courses, there is a relative abundance of high grades in Psychology. In all schools but one, the highest concentration of grades is in the "A" range. This is a function of the design of the Psychology course which is constructed on a mastery approach (modified Keller* plan) which encourages students to complete enough units for an "A" grade given a relatively flexible time frame. The distribution of grades for schools confirm the expectations for such a course.

Religion and Brass Methods

Three schools were involved in the offering of Religion 105 (Human Values) and Music 314 (Brass Methods). Though small in enrollment, both courses were successes in terms of student achievement. Table 6 summarizes Religion 105's student data, and Table 7 gives a summary for Music 314.

Summary

This report has been one that stressed growth and comparison. The growth was reflected by enrollments within schools, addition of new schools, and addition of new courses. The comparison was among schools and among courses. Each comparison confirmed the consistency of distribution of grades both within courses and within schools.

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*Keller (1968) pioneered a course design characterized by the mastery of small units of instruction which allows students to accumulate total points for a final grade.

TABLE 1

Project Advance Student Enrollment Summary

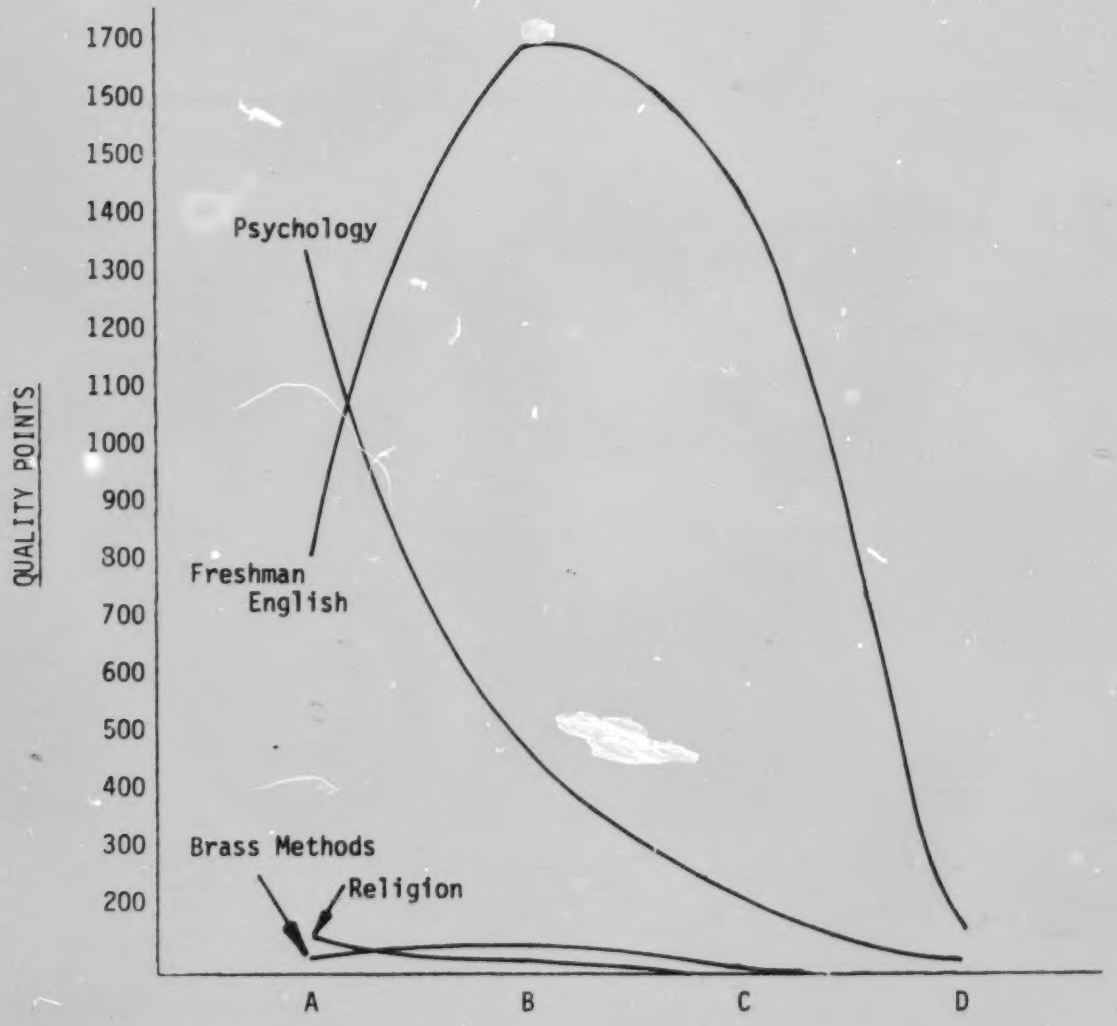
Course	Enrollment	# of Schools
Psychology 205	671	17
English 101-102	1170	34
Religion 105	16	1
Music 314	8	2
Total	1865*	54**

* Some students were enrolled in more than one course, so this number is the number of enrollments. The number of students is less (1378).

**Some schools offered more than one Project Advance course, so this figure includes dual and triple school offerings. The number of schools was 39.

Figure 1

The Distribution of Quality Points
for Each Project Advance Course



NOTE: Level-II (Pass/Fail) quality points were not recorded.

TABLE 2

The Distribution of Quality Points by Course for all High Schools Combined 1974 - 75*

Course	Grades					Total Quality Points Earned
	A	B	C	D	P	
Freshman English*	802	1692	1422	98	1170**	5184
Psychology	1329	447	210	27	----	2013
Human Values	19	26	7	0	----	52
Brass Methods	21	3	0	0	----	24
	2171	2168	1639	125	1170	7273

* Quality Point = Credit Hours x Grade Point
**Level II quality points were awarded pass/fail (P/F)

TABLE 3

The Distribution of Grades of High Schools for Freshman English, by Unit of Study 1974-75

Unit		Grade					Total Credits Earned
		A	B	C	D	P	
Essay	English 101	---	---	---	--	1170	1170
Fiction		143	465	421	19	----	1048
Poetry		161	406	400	29	----	996
Minicourses	English 102	317	561	404	39	----	1321
Independent Study		181	260	197	11	----	649
Total		802	1692	1422	98	1170	5184

TABLE 4A

Freshman E[illegible]
Course Totals -- First [illegible]nester

School	Enrollment
1	55
2	24
3	35
4	56
5	30
6	54
7	21
8	31
9	17
10	68
11	20
12	68
13	17
14	38
15	24
16	109
17	48
18	19
19	26
20	27
21	33
22	44
23	13
24	23
25	7
26	27
27	16
28	19
29	14
30	30
31	30
32	75
33	21
34	35
Total	1170

TABLE 4B

Grade Distribution: Fiction

School	A	B	C	D	Section Totals
1	9	29	13		51
2	6	10	8		24
3	7	19	10		36
4	18	18	16	3	55
5	7	8	8		23
6	9	21	21		51
7	1	7	12	1	21
8		13	17	1	31
9		11	7		18
10	7	31	23	2	63
11	5	7	7	1	20
12	10	41	21		72
13	7	5	4		16
14	1	20	17		38
15	1	5	17		23
16	15	40	44	4	103
17	4	20	19	2	45
18		12	7		19
19		17	3		20
20	7	15	4		26
21	10	13	9		32
22	2	6	16		24
23		4	5		9
24		9	11	1	21
25	4		3		7
26	2	12	15		29
27		8	5		13
28	1	9	9		19
29	1	5	4	1	11
30	1	13	15		29
31	4	10	14		28
32	8	15	10		33
33		7	13		20
34		5	17	3	25
Total	143	465	421	19	1055

TABLE 4C

Grade Distribution: Poetry

School	A	B	C	D	Section Totals
1	2	16	33		51
2	6	8	10		24
3	8	11	14		33
4	21	17	19	1	57
5	4	7	4	3	15
6	5	29	19		54
7	1	9	7		20
8	4	12	13		29
9	3	6	2		11
10	5	32	22	1	60
11	8	8	4		20
12	12	29	25	4	70
13	4	5	3		12
14	7	13	18		38
15	1	7	14		22
16	15	38	44	1	98
17	2	14	24	3	43
18	2	11	6		19
19	3	14	3		20
20	7	8	11		26
21	15	13	4		32
22	4	8	12		24
23	2	1	3		6
24		11	4	7	22
25			3		3
26	1	3	19	3	26
27	1	2	1		4
28		12	7		19
29		4	3		7
30	5	14	9		28
31	4	13	10		27
32	8	18	11		37
33	1	7	8		16
34		6	14	6	26
Total	161	406	403	29	999

TABLE 5

Distribution of Grades by High School for Foundations of Human Behavior (Psychology 205) 1974 - 75

School	Grades				
	A	B	C	D	Enrollment by School
1	51	12	0	0	63
2	19	1	0	0	20
3	11	12	5	2	30
4	9	6	1	0	16
5	13	10	4	2	29
6	16	6	0	0	22
7	10	9	2	0	21
8	28	0	0	1	29
9	81	21	15	1	118
10	19	13	14	2	48
11	23	4	2	0	29
12	20	16	5	0	41
13	28	2	0	0	30
14	18	4	0	0	22
15	61	20	8	0	89
16	21	4	11	1	37
17	15	9	3	0	27
Total	443	149	70	9	671

TABLE 6

The Distribution of grades by High School for Human Values (Religion 105)* 1974 - 1975

Course	Grade				
	A	B	C	E	Enrollment by Option
Belief Option	3	8	5	0	16
Paths of Salvation	8	6	2	0	16
Philosophical Methodology	8	8	0	0	16
	19	22	7	0	48 total grades given (# quality points)

*Religion 105 was offered each semester (1974-75) in one high school.

TABLE 7

The Distribution of Grades by High School for Brass Methods (Music) 1974 - 75

School	Grades				
	A	B	C	D	Enrollment by School
1	4	1	0	0	5
2	3	0	0	0	3
Total	7	1	0	0	8

THE PRIORITIES OF STUDENTS, PARENTS, AND SCHOOL PERSONNEL FOR PROJECT ADVANCE AND THEIR EXPECTATIONS OF PROJECT ADVANCE COURSES

David Chapman

Introduction

The concern of parents for their children, teachers for their students, and high school and university personnel for the programs they oversee are often different. Often, decisions about education have fallen to educators as the "experts" in the area. Over the last ten years, however, parents and other community groups have shown a growing interest in knowing what their schools do and an increasing desire to be involved in those decisions (Gooler, 1970). In particular, parents have become more involved in the goal setting activities of their schools (Walberg, 1973; Pincus, 1975; Leean, 1975).

One concern of Project Advance is that, as the Project expands, it remains responsive to the goals of the multiple audiences which it serves. During the first year of the Project (1973-74), a study was undertaken to identify the goals and priorities of parents and students (Slotnick and Chapman 1975) in the belief that this information would be useful in Project planning. A second use of the information was to advise high school administrators considering participation in the Project who were concerned with the reception of the program by the community. During the second year of the Project (1974-75) this study was revised and expanded to investigate the priorities of students, parents, teachers, and high school administrators involved with the program. Along with the use of this information in Project planning and advising high schools was an additional purpose: to see if people's perceptions of the Project, as expressed by their priorities, changed as the Project grew.

While the first part of this study dealt with people's priorities for the program, a second part dealt with people's expectations of the courses themselves. Specifically, this portion of the study describes and compares the expectations of students, parents, and school people (teachers and principals combined) toward Project Advance English and/or Psychology. The study was undertaken for three purposes: 1) Expectations influence subsequent ratings of a course. A knowledge of pre-course expectations aid in the interpretation of post-course ratings. 2) The Project was interested in determining the congruence of expectations across groups. This information can help guide the way the Project represents itself and is part of a concern that people's expectations not be in excess of what the program can fulfill. 3) Parents and school people influence the college plans of students. It was felt that this information might help describe the population best served by a program like Project Advance.

Methodology

The priorities of students, parents, teachers, and principals were determined by having members of each group sort thirty goal statements into five categories:

1) The two most important outcomes for Project Advance.
2) The next seven most important outcomes for Project Advance.
3) The twelve statements that were not selected for any of the other categories.
4) The seven least important outcomes of Project Advance
5) The two least important outcomes for Project Advance.

The sorting was accomplished by using a two-page "Goal Survey" in which the number items were listed on one page with respondents asked to sort statements into categories by placing statement numbers in the appropriate areas of the next page. Additionally, respondents were asked to provide limited background and demographic data. A copy of the "Goal Survey" is shown in Appendix A. Pre-course expectations were collected using the Adjective Rating Scale (ARS) (Kelly, 1971; Kelly and Greco, 1975). Respondents rated 24 adjectives across a four point scale ("extremely," "very," "slightly,", "none at all") in response to the statement, "I expect this course in Project Advance to be . . ." A copy of the ARS is found in Appendix A.

Respondents to the Goal Survey and Adjective Rating Scale included members of four groups: students enrolled in Project Advance English and/or Psychology, their parents, teachers teaching Project Advance English or Psychology, and principals of the schools where the courses were offered. Students completed the instruments in class during October 1974; teachers completed theirs during the fall teacher seminars. Parents and principals were contacted by mail at the beginning of the school year. In using the mail, all standard procedures for ensuring a high rate of return were employed. The rates of response of each group on each instrument are reported in Table 1.

Demographic information was collected on the Goal Survey to help describe each sample. A review of this information suggests that: 1) Nearly all the students in both samples expect to go to college, with the predominant preference toward four-year public and private colleges. 2) Compared to the general adult population in the United States, parents of Project Advance students are more apt to hold professional or white collar employment and have at least two years of college education. Nearly 58% of the fathers reported some college experience while 46.5% of the mothers reported at least two years of college. The parents personal experience of college might be expected to influence their priorities and expectations for Project Advance. 3) The teachers involved with Project

TABLE 1

Frequency of Useable Responses and Useable Responses as a percent of the Original Sample for Each on the Goal Survey and Adjective Rating Scale

	Sample Size	Goal Survey	Adjective Rating Scale
Students	1391[a]	1144 (32)	1292 (92)
Parents	546[b]	280 (51)	280 (51)
Teachers	80[a]	78 (99)	78 (99)
School Administators	39[c]	35 (90)	33 (84)

b = Represents the entire population within the catagory

c = Population of parents is estimated at 2780

Advance tended to be experienced teachers. Nearly two-thirds of the teachers have coursework beyond the Master's degree and the average teaching experience is 12 years. 4) The principals tended to be seasoned teachers who had considerable experience as school administrators. More detailed information is presented in work by Chapman (1975).

Instrumentation

Goal Survey. Each of the thirty items on the survey represented a possible outcome of Project Advance and each was formulated as a goal statement. For example, "Project Advance students should have less trouble adjusting to college," or "Participating in Project Advance should provide a student with an indication of his/her ability to do college work." The items were adapted from the "Student and Parent Questionnaire" developed by Slotnick and Chapman (1975) as a part of the previous year's evaluation of Project Advance. During the first year of Project Advance an independent outside evaluator of the Project conducted interviews with high school administrators, instructional materials developers, and administrative personnel associate with Project Advance to identify what they thought were important outcomes for Project Advance. The information from these interviews was condensed and reported back to a general meeting of the educators involved in the interviews. From this meeting, sixteen broad categories of goals, mentioned by at least one group of educators, but not necessarily by all, were identified, as shown in Figure 1. An item pool, was developed for each category by the evaluation staff of the Project drawing on the general literature pertaining to high school-college articulation and the evaluation documents of Project Advance. The final selection of 33 items was drawn from this pool.

Adjective Rating Scale. The ARS was originally developed as a measure of student attitudes toward college courses (Kelly, 1971; Kelly and Greco, 1975). The twenty-four terms on the instrument were originally selected from a large set of adjectives used by students at Syracuse University when they were asked to list the three words that best described the course they had just completed. Terms were chosen for their common usage and bipolarity. A principal components analysis with varimax rotation yields a five-factor solution that has been found to be internally consistent across grade level (high school to graduate), course contents, pre- and post-course administrations, and geographical settings (Kelly and Greco, 1975; Chapman, 1975). Kelly and Greco (1975) report internal reliability (alpha) coefficients for the factor scales ranging from .71 to .85. Their scales show a substantial correlation with the evaluation, potency, and

Figure 1

Categories of Possible Outcomes of Project Advance Identified by Slotnick and Chapman (1975)

1. Equivalency of Syracuse and Project Advance courses
2. Enrollment in Project Advance
3. Parental attitudes toward Project Advance
4. Students' and teachers' attitudes toward Syracuse University
5. Growth and expansion of Project Advance
6. Certification of high school teachers to teach Project Advance courses
7. Ongoing relationships between high school and Syracuse University
8. Adequacy of Project planning
9. Favorable publicity for Project Advance
10. Information for guidance purposes
11. Low dropout rate from Project Advance
12. Accessibility to Project Advance by a variety of high school students
13. Enrichment of high school experience
14. Evaluation of college potential
15. Student interest in college
16. Student performance in college

TABLE 3

Rank Order, Mean, and Standard Deviation of Statements on the Goal Survey for Students, Parents, Teachers, and Principals

Rank Order	Students			Parents			Teachers			Principals		
	Item	Mean	Standard Deviation	Item	Mean	Standard Deviation	Item	Mean	Standard Deviation	Item	Mean	Standard Deviation
1	7	2.023	.837	12	1.854	.839	12	1.84	.740	12	1.71	.777
2	12	2.049	.875	7	2.125	.838	7	1.97	.805	10	1.97	.845
3	20	2.205	.812	20	2.289	.831	29	2.16	.870	29	2.23	.528
4	29	2.406	.941	29	2.311	.870	10	2.29	.758	27	2.29	.613
5	10	2.457	.896	10	2.332	.789	8	2.34	.714	8	2.31	.666
6	1	2.525	1.100	27	2.443	.689	20	2.35	.734	1	2.31	.949
7	24	2.531	.737	24	2.496	.775	1	2.37	.809	7	2.34	.532
8	28	2.544	.852	28	2.546	.791	28	2.61	.762	20	2.37	.636
9	8	2.605	.824	8	2.554	.777	5	2.61	.687	23	2.54	.731
10	26	2.702	.766	5	2.632	.754	27	2.64	.663	24	2.57	.767
11	4	2.712	.838	30	2.711	.905	24	2.67	.707	5	2.65	.636
12	5	2.791	.770	1	2.754	.996	21	2.69	.673	21	2.66	.630
13	21	2.851	.662	4	2.761	.808	23	2.71	.753	28	2.70	.834
14	27	2.880	.732	25	2.825	.747	4	2.75	.678	30	2.77	.680
15	30	2.858	.686	26	2.832	.695	30	2.78	.749	25	2.80	.623
16	25	2.906	.773	21	2.839	.591	14	2.85	.791	4	2.83	.654
17	14	2.970	.650	23	2.889	.831	19	2.88	.648	19	2.94	.674
18	18	3.037	.712	18	3.096	.611	2	2.88	.860	26	3.00	.767
19	16	3.115	.822	14	3.157	.908	25	2.93	.699	2	3.07	.680
20	23	3.117	.772	19	3.214	.740	13	3.06	.724	16	3.11	.859
21	19	3.145	.763	2	3.421	.964	26	3.15	.648	13	3.37	.483
22	15	3.360	.758	16	3.446	.843	17	3.23	.732	14	3.39	.600
23	13	3.390	.847	17	3.461	.861	9	3.32	.586	17	3.47	.618
24	2	3.424	.977	15	3.511	.717	11	3.37	.605	18	3.50	.500
25	9	3.629	.728	13	3.575	.738	16	3.40	.659	9	3.50	.500
26	11	3.637	.728	9	3.589	.701	18	3.42	.636	22	3.56	.496
27	17	3.705	.796	11	3.764	.752	22	3.50	.627	15	3.59	.551
28	22	3.976	.792	22	3.968	.817	15	3.51	.639	11	3.63	.554
29	6	4.128	.778	3	4.061	.853	3	3.54	.607	3	3.65	.476
30	3	4.231	.807	6	4.136	.786	6	3.63	.526	6	3.73	.433
		N = 1144			N = 280			N = 77			N = 35	

TABLE 4

Spearman Rank Order Correlation Coefficient of 30 Goal Statements by Students, Parents, Teachers and Principals

Comparison	Rho	p
students with parents	.95	.001
students with teachers	.90	.001
students with principals	.87	.001
parents with teachers	.92	.001
parents with principals	.92	.001
teachers with principals	.95	.001

activity scales of the semantic differential (Kelly, 1975).

Results

Goal Survey. The procedures employed in data analysis were reported in considerable detail in work by Chapman (1975). Essentially, items on the Goal Survey were rank ordered for each group separately and Spearman rank order correlation coefficients were computed between every possible pair of groups to determine if the rankings were correlated. Results of this analysis are shown in Table 2-3. The ranking of all four groups show strong, significant intercorrelations, ($p < .001$) for the 30 goal statements for Project Advance. In other words, these four groups have a high level of agreement in their ordering of goals for Project Advance.

Several general observations will assist in the discussion of these results. First, consider the particular statements at the top and bottom of the orderings.

Top Ranked	Project Advance should improve the study of classroom skills students need in college.
	High school students who successfully complete Project Advance courses should receive college credit.
	Project Advance should receive favorable publicity in newspapers and other news media.
Bottom Ranked	Project Advance should improve high school students' feelings toward Syracuse University.

The first observation is that top ranked goals refer to benefits accruing directly to the student. They express goals that are intermediate and instrumental to the student's longer range goals of entry to and success in college. The bottom ranked goals regard benefits to the agency (Project Advance) or institution (Syracuse University), goals which might be seen as terminal or unrelated to the respondents. When students receive their college credit, their contact with the sponsoring institution, in most cases, ends and is of little or no continuing concern to the respondents. Even the school people who hope to continue the program may feel little sympathy or concern for the future welfare or prestige of the sponsors. A similar observation was made by Wilder (1968):

> Because the goals of education are in some respects the most general and long range aspects of education with which participants in the system are concerned, it is quite likely that these goals lack importance, salience, or relevance for teachers, mothers and students on a day-to-day basis. In schools, as in most organizations, terminal goals are frequently displaced by more immediate and tangible concerns.

A second general observation is that there was greater agreement among school people, especially principals, as to the least important outcomes than among either the student or parent groups (agreement is indicated by lower standard deviations associated with responses to each statement). This suggests that school people do not see their participation in the program as implying their advocacy of the sponsor. This might suggest that the personal prestige of offering a college course is less important than the perceived benefits to the local school.

A third observation is that student and parent priorities have shifted since the first year of the program. The goal study done at the end of the first year found that:

> Equivalence of student performance on and off campus and continued support from the University were most important to both groups. Favorable publicity to the Project, the University, or the school district were among the lowest ranked outcomes. Likewise, students and parents were close on the strength of importance they attached to the top and middle rated outcomes. However, more disagreement between groups was found among the lower rated items (Slotnick and Chapman, 1975, p. 75).

While in the first year, equivalent student performance and careful monitoring of the program were the priorities, by the second year the emphasis had shifted to the "competitive edge" which participation in the program might offer a student headed toward college. Perhaps this suggests that in the first year, when the program was primarily available to only Syracuse area schools, it was generally perceived as an "experiment" and attention was on whether the experiment would work. During the second year, when the program was offered statewide, it was no longer seen as an experiment but as an "instrument" with attention then shifting to the payoff--college credit, widely transferable, study and classroom skills in college. The shift may have been due to something emanating entirely from the parents themselves; or, it might have been due to the way in which the Project presented itself while recruiting new schools--as a program with some proven success. The survey may have picked up expectations which the Project itself planted. The question, in either case, is whether the Project has yet had enough "history" to warrant the shift in expectations (as reflected by the shift in priorities). Some evidence suggests that many colleges to which these students may apply have little experience and little or no policy regarding the treatment of the college credit students can earn through Project Advance (Wilbur, 1975). Moreover, the Project has little information on the study and classroom skills developed in Project Advance courses or that students find them useful in college. Until the Project has a longer history, it might be

well to retain the rubric of "educational experiment," in so far as that rubric helps keep priorities (and expectations) more within the limits of what the Project is sure it can deliver. This can be accomplished most directly in the way the Project presents itself to the schools and in the claims it makes.

Adjective Rating Scale. Responses to each group to each of the adjectives are reported in Table 5. The greatest difference in ratings for particular adjectives across groups were "Difficult," "Stimulating," "Challenging," "Enlightening," "Exciting," and "Rewarding." The expectations of school people, overall, seem to be closer to student expectations than are those of parents. Readers are encouraged to examine Table 5 and draw their own conclusions.

All three groups began the year with rather high expectations for an interesting and worthwhile experience of moderate difficulty and minimally dull or boring. The expectations seem high yet, for the most part, reasonably consistent across groups. The study does not indicate whether these expectations relate primarily to the particular teacher, the design of the Project Advance course, or whether these groups even make those discriminations in forming their expectations. In the present study, several additional (and more influential analyses) were conducted using this data.

The ARS ratings can be considered a measure of people's attitudes toward Project Advance courses. However, attitudes, when treated as multidimensional constructs (see Kerlinger, 1967; Kerlinger and Pedhauzer, 1968), can differ in two ways: 1) They can differ in composition, i.e., the adjectives that cluster together to define each factor cluster differently for each group. If that happens, groups are said to have different attitudes. 2) They can differ in direction and intensity, i.e., groups have the same composition of attitude, but hold that attitude in different degrees.

In the present study, factor analysis was first used to determine if groups shared a similar composition of attitude (as measured by the ARS) toward Project Advance courses. Then, differences in direction and intensity of groups along that attitude were examined using discriminant function analysis. Responses for each group on the ARS were factor analyzed using principal components analysis with varimax rotation of factor structures with eigenvalued over one. Teachers and principals were collapsed into one group termed "School People." Since the factor structures of all three analyses (students, parents, school people) were all highly congruent, data from all three groups were pooled and refactored. The analysis resolved into a four factor solution, labeled Interest Value, Practical Value, Dullness and Difficulty. Responses for each group were scored

TABLE 5

Precourse Expectations of Parents, School People, and Students as Indicated on the Adjective Rating Scale in Response to the Statement "I expect [this/a] course in Project Advance to be..." (Reported as percent of each group responding)

	Pre-Course Expectations Parents (N=376)		Pre-Course Expectations School People (N=111)		Pre-Course Expectations First Semester Project Advance English--Overall (N=945)		Pre-Course Expectations First Semester Project Advance Psychology--Overall (N=356)		
	extremely/ very	slightly/ not at all	extremely/ very	slightly/ not at all	extremely/ very	slightly/ not at all	extremely/ very	slightly/ not at all	
Interesting	95.7	4.3	96.4	3.6	74.5	25.5	91.3	8.7	Interesting
Boring	1.6	98.9	1.8	98.2	5.2	94.8	4.0	96.0	Boring
Relevant	89.9	10.1	92.8	6.9	82.6	17.4	86.4	13.5	Relevant
Informative	97.0	3.0	97.3	2.7	87.9	12.1	96.7	3.3	Informative
Difficult	38.1	61.8	75.3	24.7	51.1	48.9	38.7	61.2	Difficult
Good	96.8	3.2	98.2	1.8	86.7	13.4	89.2	10.7	Good
Stimulating	93.9	3.2	96.4	3.6	62.7	37.2	73.8	26.2	Stimulating
Irrelevant	4.5	95.5	0.9	99.1	6.0	94.0	4.4	95.6	Irrelevant
Worthwhile	97.3	2.7	98.2	1.8	93.5	6.6	92.9	7.1	Worthwhile
Valuable	94.9	5.1	100.0	0	92.8	7.2	89.6	10.4	Valuable
Necessary	59.9	40.2	75.0	25.0	72.7	37.3	42.1	57.9	Necessary
Dull	1.1	98.9	0.9	99.1	7.8	92.2	6.0	94.0	Dull
Challenging	96.0	4.0	99.1	0.9	84.2	15.9	81.7	18.4	Challenging
A Waste	0	100.0	0	100.0	2.9	97.2	3.2	96.8	A Waste
Practical	81.8	18.2	89.1	10.9	81.3	18.7	75.8	24.2	Practical
Demanding	72.0	28.0	95.5	4.5	72.9	27.1	62.9	47.0	Demanding
Different	53.9	46.1	60.6	39.4	65.4	34.6	71.0	29.0	Different
Enjoyable	77.8	22.2	88.2	11.8	51.0	49.1	71.8	28.2	Enjoyable
Enlightening	9.25	7.5	95.5	4.5	64.5	35.4	83.1	16.9	Enlightening
Exciting	68.4	31.5	74.5	25.4	38.9	61.1	54.3	46.7	Exciting
Rewarding	96.3	3.7	98.2	1.8	82.2	17.7	78.0	22.0	Rewarding
Provocative	64.9	35.1	87.3	12.7	45.2	54.8	50.3	49.7	Provocative
General	24.3	75.7	20.8	79.2	20.3	79.7	17.4	82.6	General
Useless	1.9	98.1	5.6	94.4	3.5	96.5	3.3	96.7	Useless

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across factor scales developed from this solution (Chapman, 1975).

Since groups shared a similar composition of attitude toward these courses, the next step was to compare the direction and intensity of differences in this attitude among the groups. Since statistical independence of factors was lost by the scaling procedure, discriminant analysis was chosen as the procedure to use in considering differences in direction and intensity of attitude toward these courses across the three groups. Results of the stepwise discriminant function, reported in detail elsewhere (Chapman, 1975b), indicated significant differences in the direction and intensity of pre-course expectations among students, parents and school people.

Interpreting discriminant functions must be done with caution and results should not be oversimplified (Tatsuoka, 1971). The interested reader is referred to the more technical write ups (Chapman, 1975a).

Parents and school people were similar in their expectation that the courses would be "more dull/less interesting" while students differed significantly, expecting a "more interesting/less dull" course. At the same time, students and parents were very similar in expecting a more difficult course while school people differed significantly in expecting a less difficult course.

The higher expectation of an interesting experience on the part of an entering student may hint at what Stern (1970) calls the freshman myth--an idealized stereotype of the college experience often help by entering college freshmen. At the same time, the expectation of a less interesting and less difficult course on the part of the school people may suggest a slightly jaundiced view of the college experience, at least as it is translated into the college setting. Further research may well consider how these varying expectations of a college experience translate into advice and counsel to the college bound student.

Conclusion

This study investigated the priorities of students, parents, teachers, and principals among thirty possible outcomes for Project Advance. Results indicated that these four groups have a high level of agreement in their ordering of goals for Project Advance. The study also indicates that students and parents may have shifted from seeing the Project as an experiment as indicated in the first year's evaluation to seeing the Project as an "investment" with more attention to the payoff, i.e., college credit and preparation for a successful college experience.

Secondly, this study investigated the expectations of students, parents, and school people toward courses in Project Advance. All three groups began

the year with rather high expectations for an interesting and worthwhile experience of moderate difficulty and minimal dullness. At a more inferential level of analysis, some significant differences are observed among groups.

EVALUATION OF PROJECT ADVANCE FRESHMAN ENGLISH

a. A Comparison of Freshman English Essays Written by Project Advance and Syracuse University Students, 1974-75

b. Students Ratings of Project Advance Freshman English

David Chapman

Project Advance Evaluation
Freshman English
1974-75

This report of the evaluation of Project Advance English is organized around three questions which are often asked about the course: How does the course operate? Does students' performance in the course really meet college standards? And, how do students rate the course? Specifically, it describes Project Advance Freshman English as it was offered during 1974-75. It reports on a study which compared the quality of papers written by students in Project Advance Freshman English with those written by students in Freshman English at Syracuse University. Lastly, it describes student response to the course as the course operated in their high schools.

Description of Project Advance Freshman English

The freshman English course offered at Syracuse University and in the high schools through Project Advance is a self-paced course focusing on composition and literature. The structure of the course is outlined in Table 1. The student initially demonstrates his proficiency in basic grammar and composition skills on a placement test which indicates at what level he should begin the course. A student deficient in basic grammar skills is placed in Level I, where he is assigned relevant self-instruction texts and is regularly given criterion tests in the area(s) of his weakness. When he reaches a predetermined level of proficiency measured by these criterion tests, the student moves into Level II (Essay Writing). The student, on the other hand, whose performance on the diagnostic test demonstrates adequacy in these basic grammar skills may be placed immediately in Level II where a diagnostic essay is written. If he writes a weak essay, the student remains in Level II where he must write at least two consecutive passing essays before moving to Level II (Literature). A strong diagnostic essay will place him in Level II, which consists of a series of minicourses in fiction, poetry, selected literary topics, and independent research.

Wherever a student is placed in the course, he moves at his own pace toward advanced levels. The self-paced concept in English assumes and accommodates the wide range of English language proficiency which students bring to college.

A Comparison of the Quality of Papers Written by Students in Project Advance Freshman English with Those Written by Students in Freshman English at Syracuse University

This study was designed to serve two purposes: first, to compare the quality of student writing between the Project Advance and campus courses, and second, to describe the characteristics of passing and failing papers written by Project Advance students. In comparing the quality of papers, the study answered two questions: 1) Were papers written by Project Advance students which received passing grades as good as passing papers written by students on campus? and 2) Were failing papers written in Project Advance English as poor as papers which were considered failing on campus?

To answer these questions, three judges were asked to describe and compare both passing and failing papers written on- and off-campus. This procedure was conducted once for papers at Level II and repeated for papers at Level III. The judges were not told whether the papers they read were considered passing or failing or whether the student authors were from Syracuse University or Project Advance. The three judges participating in this study had all experience with the teaching materials and procedures that were used by the Syracuse University English Department to teach writing. Two of the three judges were familiar with the goals and design of English instruction in Project Advance.

The essays used in the study were collected by the evaluation staff from both the Syracuse University English Department and the Project Advance teachers. At both Level II and Level III, papers were collected in each of the following groups:

High School Passing
High School Failing
Syracuse University Passing
Syracuse University Failing

Twenty papers were randomly selected from each of these groups. The random sampling helped ensure that the results would generalize to all the students' efforts. However, in examining the samples, one change was found to be needed. The passing papers collected on campus at Level II during the second semester were primarily from tutor sections which were designed to serve students progressing more slowly. While these papers were "passing," they were not judged to be representative of the quality of campus passing papers overall. To offset this, five of the strongest Level II campus passing papers were selected from the 1974-75 English evaluation and replaced by the five weakest passing papers from the tutor sections. With this change, the new on-campus passing

set of papers was judged to be representative of on-campus passing papers in general.

Each group of twenty papers was then randomly separated into two piles of ten papers each. One pile from each group was presented without identification to each judge for examination. The judges reviewed the papers to decide how the essays in each group were similar to one another and different from those in other groups. They were allowed to use whatever criteria they wished.

Level II--Composition

At Level II, the judges established eight criteria along which the papers were considered. These included Grammar and Mechanics, Language Competency, Style, Organization, Support, Topic and Thesis, Logic, and Depth of Thought. Judges' comments describing each pile of papers across these criteria are presented in Figure 1.

The judges considered three piles of papers to be acceptable passing papers. These included Project Advance Passing, Project Advance Failing, and Syracuse University Passing.

Project Advance passing papers were described as well organized, competent compositions which were generally successful in pursuing difficult ideas. They were clearly the best pile of papers examined.

Project Advance failing papers were considered the next best set of papers. They were characterized by few problems; where problems occurred, they were minor. Students demonstrated large working vocabularies and generally attempted to pursue difficult ideas.

Syracuse University passing papers were very close to the Project Advance passing papers; they differed in the areas of organization and support. Papers had few problems with grammar and mechanics; topic and thesis were generally clear. However, the papers had major problems with organization, primarily the organization within the paragraphs. There were frequent illogical connections between statements. Support was present but frequently insufficient.

Syracuse University failing papers were by far the poorest set of papers examined and were considered by all judges to be clearly failing. These papers were characterized by frequent problems in grammar, mechanics, and agreement so serious that the notion of style did not even apply. The logic of the papers was poor; the depth of thought was shallow.

Figure 1

JUDGES DESCRIPTIONS OF PROJECT ADVANCE AND SYRACUSE UNIVERSITY PAPERS WRITTEN AT LEVEL II

	Grammar and Mechanics (Spelling, punctuation, agreement)	Language Competency (Sentence structure, fragments, run-ons; dialect problems; overall degree of seriousness of language use errors)	Style (Diction, i.e., word choice and range of vocabulary clarity; appropriateness; consistency of style, sophistication of style)
Project Advance Passing	Few problems; generally minor	Competent	Large working vocabularies. Wide range and control of sentence structures and rhetorical effects. Papers are clear, appropriate, and sophisticated in most cases.
Project Advance Failing	Few problems; generally minor.	Competent	Range of vocabulary was better than either set of University papers. Sentence structure was varied (rhetorical questions, etc.) including inversions. Some successful attempts at sophistication of style, fairly clear style.
Syracuse University Passing	Spelling is generally not a serious problem. Punctuation and agreement are adequate.	Fragments and run-ons are rare. Mistakes are in punctuation rather than sentence structure. Sentence structure lacks variety--mostly simple sentences with moderate use of subordination.	Style does not apply to these papers.
Syracuse University Failing	Spelling errors in "speaking vocabulary." Frequent grammatical and mechanical errors. Frequent agreement problems.	Fragments and run-ons are in most papers. Students do not seem to have a solid notion of what a sentence is. Errors may limit ability of reader to understand.	Style does not apply to these papers.

Figure 1 (con't.)

JUDGES DESCRIPTIONS OF PROJECT ADVANCE AND SYRACUSE UNIVERSITY PAPERS WRITTEN AT LEVEL II

	Organization (Development and progression; consistency; agreement present and well done; paragraphing, and transitions)	Support (Presence; type; sufficiency; appropriateness)
Project Advance Passing	Generally good organization (through the use of sophistication modes of organization). Clear beginning, middle, and end. Clear sense of what an argument is. Arguments are convincing. Good progression across paragraphs and good transitions. Good and varied paragraphs, internally well organized.	Assertions almost always supported by a variety of types of support--authority, facts (some irrelevant), opinions, emotional appeal, etc. Support is generally sufficient and appropriate.
Project Advance Failing	Papers are organized (but the range is poor to good). Paragraphs are in the appropriate order, but the organization within paragraphs is often lacking. Transitions are recognized as important but not well handled.	Assertions generally supported by a number of pieces of evidence. Support is generally sufficient. Types of support include mostly facts (though they may be incorrect), opinion (but seldom used exclusively). Support is generally appropriate to assertion.
Syracuse University Passing	Major problems with organization. Development is weak or non-existent (often repetitive); not clearly divided into parts. Little ordering between paragraphs. Transitions were inappropriate. Students seemed to have little or no grasp of the logical structure of what the argument should be like to convince the reader.	Support is present but frequently insufficient. Evidence is often opinion and cliches.
Syracuse University Failing	Organization was poor. Papers were serially ordered (series of unintegrated statements). Generally no beginning or end, or, the end is "forced." There is a concept of "paragraphs," but it is weak (sometimes too much in a paragraph, sometimes too little in a paragraph). Little ordering within and between paragraphs. No transitions.	Some attempts at support; no formal distinctions between types of evidence. Restatement of assertions offered as support. More frequent use of unsupported opinion. Support is sometimes inappropriate, generally inadequate. Writers appear not to know how to support their assertions.

Figure 1 (con't.)

JUDGES DESCRIPTIONS OF PROJECT ADVANCE AND SYRACUSE UNIVERSITY PAPERS WRITTEN AT LEVEL II

	Topic and Thesis (Topic present and limited; thesis present and limited)	Logic (Definition of terms; consistency; logical failures)	Depth of Thought (Superficial; well thought out)
Project Advance Passing	Little or no confusion about topic and thesis.	Definitions well developed and well used. Sophisticated definitions. When logical errors occur, they are sophisticated. Many assumptions are examined.	Generally successful in pursuing difficult ideas.
Project Advance Failing	Topic always defined and generally well limited. Thesis generally defined and limited but often weakly stated. The papers, as a group, were inconsistent.	Terms are generally defined (with some outstanding failures). Writers are aware of the fact that terms need to be defined. Assumptions are occasionally examined. No gross logical inconsistencies, but some more subtle inconsistencies.	Papers generally deal with more difficult issues and often attempt to pursue ideas to their logical conclusions (with some notable exceptions).
Syracuse University Passing	Topic clear and generally limited. Thesis present and generally clear.	Illogical connections between statements. Few problems with undefined terms, but definitions (when present) may not be as strong as they might be. Logical inconsistencies appear often. Students do not understand the concepts of relations and explanations.	Some beginning efforts to exceed superficiality, but the attempt often fails.
Syracuse University Failing	Topic present but not limited and sometimes not well defined. Topic shifts frequently. Papers seldom have a thesis statement although a purpose may be present.	Terms are ill-defined and sometimes misused. Self contradictions are frequent. Frequent errors in reasoning. Frequent logical fallacies (e.g., non-sequitor).	Generally shallow.

Are the distinctions provided by these descriptions clear enough to the judges to allow them to classify a new set of papers? In other words, how reliable are the descriptions for each set of papers?

After the descriptions of each pile were complete, the three judges were each given a set of forty papers consisting of the remaining ten papers from each group (passing and failing, on- and off-campus). These papers had been randomly shuffled together. Again, the source and authorship of these papers were not known by the judges. The judges were asked to sort these forty papers into four piles according to the earlier descriptions.

To make it easier to determine how reliable the judges were in assigning grades to papers, the following numerical values were used to indicate the quality and suggested level of the groups of papers:

1--Project Advance Passing
2--Project Advance Failing
3--Syracuse University Passing
4--Syracuse University Failing

Inter-judge reliability coefficients were computed using these values (see Table 1) and the reliability of the composite scores (i.e., the sum of the scores assigned by all three judges) was estimated to be .68 using the Spearman-Brown prophecy formula.

TABLE 1

Correlation Among Judges for Level II

Judge	Mean	Standard Deviation	Judge 1	Judge 2	Judge 3
1	2.03	.94	1.00		
2	1.93	.91	.33	1.00	
3	2.15	.82	.64	.55	1.00
Criterion	2.50	1.12	.37	-.33	.38

N = 40. All correlations are significant at $\alpha = .05$.

The low inter-judge reliability was due largely to the negative correlation of the ratings of Judge 2 with criterion. Since the two remaining judges demonstrated substantial agreement with each other (r = .64) and their ratings had a healthy correlation with the actual source of the papers, the inter-judge reliability was recomputed on the basis of Judges 1 and 3, again using the Spearman-Brown prophecy formula. The inter-judge reliability using two judges

was estimated to be .78, a reliability indicating that confidence could be placed in decisions about groups of papers (i.e., Project Advance Passing) but that the scores of individual papers might be less stable. A sample of papers from each category is found in Appendix A.

The ranking of both Project Advance passing and failing papers above the Syracuse University passing papers deserves some comment. Several alternative explanations can be suggested. First, students taking English in Project Advance may, as a group, be stronger students than those taking the course on-campus. Many high schools advise only their best students into this course while the best students on-campus do not take Freshman English, but go directly to a higher level course. A second explanation might be that standards differ on- and off-campus. The results may suggest that the teaching in Project Advance is more carefully supervised than the teaching on-campus. The third explanation, closely related to the second, is that the quality of the instruction may differ. High school teachers in Project Advance tend to be experienced in the pedagogical skills of teaching composition. The graduate teaching assistants on-campus tend to have limited experience in teaching composition skills and greater interest in teaching literature. The fourth alternative is that the sets of papers used in the evaluation were not representative.

Level III -- Literature

The same general procedure was used in examining Level III papers. These papers were critical literary reviews rather than the more personal writing used in Level II. Since these papers were much longer than the other essays, fewer of them could be read in the time allocated for this study. Consequently, the judges were each presented with five papers from each of the four sources. Only papers from the current year were used in this portion of the study.

The judges established six criteria to use in describing Level III papers. These included: Topic and Thesis, Support and Logic, Grammar and Mechanics, Diction and Usage, and Style and Organization. The judges' descriptions of each pile are found in Figure 2.

At Level III, the passing papers from both Syracuse University and Project Advance were described as passing papers by the judges. Likewise, both sets of failing papers were considered failing by the judges. However, the ranking of the papers in terms of relative quality differed from that at Level II.

Syracuse University passing papers were considered to be the best set. These papers were generally successful in pursuing difficult ideas, had good focus, and demonstrated a highly sophisticated understanding of the task.

Figure 2

JUDGES DESCRIPTIONS OF PROJECT ADVANCE AND SYRACUSE UNIVERSITY PAPERS WRITTEN AT LEVEL III

	Topic and Thesis (Presence of thesis, topic and thesis limited; conceptualization of the problem; application of critical method; depth of understanding)	Support and Logic (Presence, type, appropriateness, sufficiency)	Grammar and Mechanics (Spelling; punctuation; agreement; run-ons; sentence structure failures)
Syracuse University Passing	Topic and thesis are generally good, but development is uneven. Topic and thesis are well limited. Clear understanding of the task. Generally good and consistent application of the critical method. Clear depth of understanding.	Support is present with many good examples, though the examples are occasionally inappropriate. Frequent and effective use of quotes. Evidence is generally sufficient to prove a point.	A few spelling and punctuation problems. A few sentence structure problems. Some fragments.
Project Advance Passing	Thesis is generally weak and unclear but topic is generally defined and shows understanding of the tasks of literacy analysis. Parts of the analysis are often good, however, some parts may not be relevant to the primary aim of the paper. Papers occasionally show real depth of understanding.	Support is present (quotation, specific references); sometimes sufficient, sometimes inadequate, but generally appropriate.	A few minor grammatical errors. Some awkward and weak sentence structures.
Project Advance Failing	General inability to define a literary problem. Hence, problems in all other areas result.	Some use of quotations and examples but heavy reliance on summary statements not requiring support. Students had a tendency to digress while introducing evidence. Evidence is often inappropriate (because of the digressions). Papers show an awareness of the need for supporting evidence. Evidence is generally sufficient.	A few spelling problems and minor punctuation problems. Some grammatical problems.
Syracuse University Failing	General problem in the thesis (either so general or so vague that an argument cannot be developed to support it). Topic not properly limited. Inability to define the tasks of literacy analysis and therefore lacks a critical method. Shallow depth of understanding.	Heavy use of summaries. Infrequent use of quotations. Many unsupported statements and use of non-argumentative statements that do not demand support.	Serious spelling problems (words they should know how to spell). Punctuation problems (misuse of apostrophies, missing and unused commas, misuse of colons and semicolons, quotation marks and associated punctuation). Occasional fragments. Agreement problems (e.g., subject-verb). Occasional comma splices.

Figure 2 (con't)

JUDGES DESCRIPTIONS OF PROJECT ADVANCE AND SYRACUSE UNIVERSITY PAPERS WRITTEN AT LEVEL III

	Diction and Usage (Word choice; misuse of words)	Style (Variety of sentence sturcture: level)	Organization (Paragraphing--overall organization; internal structure of paragraphs; transitions--sense of development; conclusions; plot summary versus reasoned analysis)
Syracuse University Passing	Numerous problems in word choice and usage in an attempt to make rather sophisticated statements.	Nearly all papers have sophisticated and varied sentence structures. Some highly sophisticated sentence structures do not work	Generally a sense of overall organization and development, but only a few papers remain consistent throughout. Some excellent transitions, but in some others the transitions are entirely lacking. Internal structuring of paragraphs is generally good. Conclusions are generally good. Students frequently employed relevant conclusions to tie the threads of the argument together. Most papers present a reasoned analysis.
Project Advance Passing	Minor word choice errors.	Moderately comfortable with formal style and fairly sophisticated sentence structures (e.g., inversions).	Individual paragraphs are generally well organized but the relationship between paragraphs is sometimes weak (sometimes due to a lack of flow). Generally an understanding of the need for conclusions. Conclusions are always attempted and sometimes are well executed. No plot summaries. There is generally a sense of reasoned analysis and logical clarity.
Project Advance Failing	Tendency toward wordiness. Awkward phrasing.	Style is forced. Students seem to be writing according to what they think is expected of them and they are less able to handle formal style fluently. Some lack of clarity.	Poor paragraphing (both internally and overall--probably derived from an inability to define a literary problem. Occasional reliance on plot summary rather than reasoned analysis, though there is generally an attempt to draw conclusions.
Syracuse University Failing	Frequent problems of word usage. Improper word choice is frequent.	Failing in attempts to produce sophisticated structures. Sentence structure generally simple and repetitive. Some attempts at variety, including inversions. Many major sentence failures. Frequent lack of clarity.	Plot summaries instead of argument. Organized around plot instead of argument. A reliance on a temporal sequence rather than a logical argument. Little reasoned analysis. Internal structure of paragraphs is random or plot based.

Project Advance passing papers were described as having fairly good organization and demonstrating a good understanding of the task; however, the papers lacked focus. The individual paragraphs were generally well organized but the relationship between paragraphs was sometimes weak. Support was generally appropriate but not always adequate. These papers were distinguished from Syracuse University passing papers primarily by the larger number of grammar and mechanical problems in the high school set.

Project Advance failing papers were ranked next in overall quality. The judges observed a general inability to define a literary problem, hence, problems in all other areas resulted. Style seemed forced. Students seemed to be writing according to what they thought was expected of them. Organization was poor, both within the paragraphs and for the paper overall.

Syracuse University failing papers were rated as by far the poorest set. These papers were characterized by frequent basic writing errors. There were serious spelling and punctuation problems and occasional fragments. These authors demonstrated the least comprehension of the task.

Again at Level III, the characteristics identified by the judges after reading this first set of papers were used to sort a second set of twenty papers. The interjudge reliability using all three judges was .57. However, again, the ratings of one judge, number 1, correlated quite low with the ratings of the other two. (Note that the discrepancy in rating at Level II involved a different judge than at Level II.) Since the ratings of the other two judges had a rather high intercorrelation, the interrater reliability was recomputed using only Judges 2 and 3. This yielded an interrater reliability of .83. Again, this indicates that confidence can be placed in these descriptions as a basis for making decisions about groups of papers.

TABLE 2

Correlation Among Judges for Level III

Judge	Mean	Standard Deviation	Judge 1	Judge 2	Judge 3
1	2.45	.92	1.00		
2	2.50	1.03	.45	1.00	
3	2.65	1.06	.42	.71	1.00
Criterion	7.60	2.58	.41	.44	.61

N = 20.

Conclusion

The purpose of this portion of the evaluation was first to compare the quality of student writing between the Project Advance and Syracuse University Freshman English course, and, second, to describe the characteristics of passing and failing papers written by Project Advance students. Given the procedures described in this paper, the following conclusions have been reached:

1. Papers written by Project Advance students at both Level II and III met the standards applied to passing papers in Freshman English at Syracuse University.
2. At Level II, Project Advance papers, both passing and failing, were better than the corresponding papers written by Syracuse University students.
3. Level III Project Advance failing papers were better than the failing papers on-campus.

Student Ratings of Project Advance Freshman English

The third part of the evaluation was to determine student attitudes toward the course. This information is useful because if helps describe the course to prospective students who might be interested in how their peers perceived it. It also helps identify aspects of the course working particularly well and those needing revision. This section is divided into three parts. The first reports student ratings on the Adjective Rating Scale. Part two describes the responses of students to 16 other questions regarding the course and offers some interpretation of this data. The third part examines how students who differed in their achievement in this course (grade earned and/or number of credits earned) differed in their ratings of the course.

Adjective Rating Scale (ARS)

The ARS was developed at the Syracuse University Center for Instructional Development (Kelly and Greco, 1975) as a measure of student attitude toward college courses. Project Advance English students completed it twice, once at the beginning of the fall semester asking students to rate what they expected from the course, and again at the end of the course asking students what they had found. Comparing these ratings helps answer the question, "Do students enrolled in Project Advance English have reasonably accurate expectations of the course?" Table 3 reports student pre-course expectations and post-course ratings.

TABLE 3

Student Pre-Course Expectations and End-of-Course Ratings of Project Advance Freshman English During 1974-75

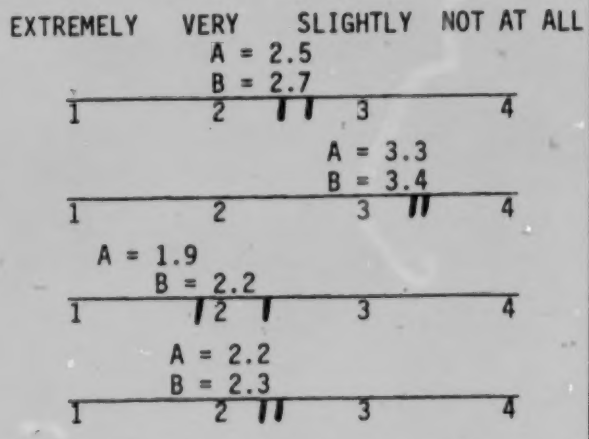
I (expect/found) this course in Project Advance to be _____ _

	Pre-course Expectations First Semester Project Advance English--Overall (N = 945)		End-of-Course Ratings Second Semester Project Advance English--Overall (N = 735)	
	extremely/ very	slightly/ not at all	extremely/ very	slightly/ not at all
Interesting	74.5	25.5	54.2	45.9
Boring	5.2	94.8	11.6	88.4
Relevant	82.6	17.4	68.0	32.0
Informative	87.9	12.1	75.6	24.4
Difficult	51.1	48.9	47.3	52.7
Good	86.7	13.4	65.1	34.9
Stimulating	62.7	37.2	35.2	64.8
Irrelevant	6.0	94.0	8.9	91.1
Worthwhile	93.5	6.6	78.4	21.6
Valuable	92.8	7.2	76.2	23.7
Necessary	72.7	37.3	51.9	48.1
Dull	7.8	92.2	16.0	84.0
Challenging	84.2	15.9	72.8	27.1
A Waste	2.9	97.2	6.6	93.4
Practical	81.3	18.7	63.2	36.8
Demanding	72.9	27.1	73.0	27.0
Different	65.4	34.6	63.0	37.0
Enjoyable	51.0	49.1	30.1	69.9
Enlightening	64.5	35.4	48.5	51.5
Exciting	38.9	61.1	16.7	83.3
Rewarding	82.2	17.7	59.0	41.1
Provocative	45.2	54.8	32.0	68.0
General	20.3	79.7	21.1	78.9
Useless	3.5	96.5	5.0	95.0

These student ratings can be condensed into four "clusters" of words, (that is, words that relate to each other) using factor analysis. When students tend to rate one word in a cluster high, they tend to also rate other words in that cluster high (or low, if the word is negatively related to the cluster). For example, in the first cluster below, students who rated a course "interesting" tended also to rate the course "stimulating" and not (-) "boring" or "dull." Each cluster can be treated as a single idea and can be assigned a single score (an average of the individual item scores). By examining the words that form each cluster, the reader can give each cluster a label. For example, Cluster 4 might be labeled "Difficulty."

A) Pre-Course Rating--Project Advance Overall--Fall 1974
B) Post-Course Rating--Project Advance Overall--Spring 1975
C) Post-Course Rating--Your High School--Spring 1975

Clusters



*A minus (-) sign indicates that this word is rated lower as the other words are rated higher [i.e., (-) boring = not boring, (-) dull = not dull].

Figure 3: Student Ratings of Project Advance English Along Four Adjective Clusters (from the Adjective Rating Scale)

Overall, the differences between student expectations and post-course ratings are not striking. The reader is encouraged to develop his own labels for the four clusters. For purposes of this discussion they might be labeled "Interest Value," "Dullness," "Practical Value" and "Difficulty," respectively. Overall, students rated the course to have somewhat less Interest Value and to be somewhat less Difficult than expected. The greatest difference between expectations and end of course ratings was on Practical Value. Students expected the course to have more Practical Value than they later rated it to have. Students found the course to be somewhat more Dull than they had expected it to be.

Student Responses to Other Questions

In addition to the Adjective Rating Scale, students at the end of the course were asked to respond to 18 other questions regarding Project Advance English.

End-of-Course Ratings
English

All things considered, this course was

excellent	19.9
good	55.8
fair	21.1
poor	3.2

Overall, how would you rate the interest level of the class discussions in this course?

extremely interesting	4.9
interesting	63.9
dull	22.2
really dull	5.5
does not apply	3.6

Overall, how would you rate the interest level of the lectures in this course?

extremely interesting	5.9
interesting	50.1
dull	27.7
really dull	7.0
does not apply	9.2

Overall, how would you describe the readings in this course?

very beneficial	30.2
adequate	55.8
confusing	8.4
a waste of time	4.0
does not apply	1.6

Generally, how would you describe the work load required by this course?

very excessive	11.5
heavy	41.4
just right	43.4
rather light	3.4

Rate the fairness of the college grading procedure (the assignment of letter grades that were used in this course).

excellent	10.8
good	51.5
fair	29.5
poor	8.3

Materials for this course were available when I needed them.

always	44.2
usually	48.2
rarely	6.3
never	1.2

Was this course an enjoyable experience for you?

always	5.5
frequently	41.1
occasionally	46.1
never	7.3

On the whole, how much do you think you learned?

a great deal	55.9
some	37.5
not very much	6.2
nothing	.4

Required test(s)

excellent	6.7
good	46.7
fair	35.7
poor	10.9

Assigned reading(s)

excellent	15.1
good	61.8
fair	20.0
poor	3.1

Programmed booklets*

excellent	11.7
good	48.3
fair	32.6
poor	7.3

*383 students responded to this question

Films**

excellent	18.0
good	45.1
fair	26.4
poor	10.5

**401 students responded to this attitude

Rate the adequacy of your opportunity to meet directly with your teacher.

excellent	54.5
good	30.9
fair	10.7
poor	3.9

Would you recommend this course to your best friend?

yes	69.2
no	30.7

Some Observations and Comments

1. Overall, student ratings of Project Advance English were positive.
2. Within that positive range, students more often rated the course "good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale, though the top two categories were collapsed for easier reading.
3. Few large differences were observed between pre-course expectations and post-course ratings. However, for the most part, where these shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be.

These data help us to answer one additional question: Do students who differ in their performance in this course also differ in their ratings? One aspect of this question is: Do students who did not do as well in the course still find it to be a positive and worthwhile experience?

In the English course achievement can be considered in two ways: 1) as a student's average grade in the course and, 2) as the number of credits a student earns. Table 4 compares the responses of students who differ in grades and credit earned across selected statements on the course evaluation questionnaire.

TABLE 4

Comparison of Student Responses on End of Course Questionnaire Between Students Earning "A's" and Those Earning "C's" and Between Students Earning 4-6 Credits and Those Earning 1-3 Credits

End of Course Questionnaire	Responses	Students Earning "A" (N = 63)	Students Earning "C" (N = 214)	Students Earning 4 to 6 Credits (N = 407)	Students Earning 1 to 3 Credits
All things considered, this course was	excellent/good	85.7	72.3	80.1	68.9
	fair/poor	14.3	27.6	19.9	31.1
Overall, how would you rate the interest level of class discussions in this course?	extremely interesting/ interesting	73.0	67.2	70.0	67.0
	dull/really dull	27.0	32.8	30.0	33.0
Generally, how would you describe the work load required by this course?	very excessive/heavy	41.9	60.1	52.7	53.4
	just right/ rather light	58.1	39.9	47.3	45.6
Rate the fairness of the college grading procedure.	excellent/good	77.8	49.8	63.3	57.4
	fair/poor	22.2	50.2	36.7	42.6
Materials were available for this course when I needed them.	always/usually	95.2	88.7	91.9	95.8
	rarely/never	4.8	11.3	8.2	4.2
Was this course an enjoyable experience for you?	always/frequently	63.5	33.2	47.2	42.0
	occasionally/never	36.5	64.9	53.8	58.0
On the whole, how much do you think you learned?	a great deal/some	91.9	92.9	95.0	91.5
	not much/nothing	8.1	7.1	5.0	8.5
Rate the adequacy of your opportunity to meet directly with your teacher.	excellent/good	80.3	83.6	87.7	76.7
	fair/poor	19.6	16.4	12.4	23.3
Would you recommend this course to your best friend?	yes	85.0	63.5	72.1	61.9
	no	15.0	36.5	27.6	38.1

Students who differed in the amount of college credit they earned did not differ much in their overall ratings of the course. In particular, students earning less credit (1-3 credit hours) differed by only 5% from students earning more credit (4-6 credit hours) in their rating of how much they thought they had learned. Students earning less credit found the workload to be as demanding as those who earned more credit. Overall, students were much more positive about the amount they thought they earned than about the enjoyability of the experience. One slight difference between students who differed in credits earned was their perceptions of the fairness of the college grading procedures. Students who earned somewhat less credit were less positive about the college grading practices than those who earned more credit. Moreover, students earning less credit were slightly less apt to recommend the course to their friends.

More marked differences appear among students who differ in their grade average. Students who averaged a "C" found the course considerably less enjoyable and the workload much heavier than students who averaged an "A." Interestingly, the groups did not differ in the amount they thought they learned. In other words, students felt they had learned from the course, but students who had not done as well found it a much less positive experience. Still, "C" students rated their adequacy of their opportunity to meet directly with their teachers somewhat higher than the "A" students. One of the most marked differences between groups was their ratings of the fairness of the college grading procedures. Students who did not do well felt the assignment of college grades was far less fair than did students who received "A's." Moreover, far fewer "C" students were willing to recommend the course to their friends than were "A" students.

These results suggest that the amount of credit a student earns makes little difference in their ratings of the course but that the grade(s) they receive make(s) a substantial difference. Both groups feel they learned freshman English, but "C" students found the experience far less enjoyable and are less willing to recommend the course. One explanation for the influence of grades and the lack of influence of credits earned on course ratings may be their relative impact on the transferability of credit. The amount of credit a student earned would not necessarily influence a college's decision to accept that credit in transfer. However, the student's grade in the course would influence the decision.

Summary

The evaluation of Project Advance Freshman English compared the quality of student writing between Project Advance and Syracuse University Freshman English courses and described the characteristics of passing and failing papers from these two sources. Secondly, it examined student ratings of the Project Advance course and compared the rating of students who differed in the amount of credit they earned and those who differed in the grades they received.

The results of the writing comparison indicate that papers written by Project Advance students at both Level II (Composition) and Level III (Literature) met the standards applied to passing papers in Freshman English at Syracuse University. At Level II, Project Advance papers, both passing and failing, were better than the corresponding papers written by Syracuse University students. Level III Project Advance failing papers were better than the failing papers on-campus.

Overall, student ratings of Project Advance English were positive. However, within that positive range, students more often rated the course "good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale, though the top two categories were collapsed for easier reading. Few large differences were observed between pre-course expectations and post-course ratings. However, for the most part, where these shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be. Students who differed in the amount of college credit they earned did not differ much in their overall ratings of the course. However, marked differences appeared between students who differed in the average grade they received (A's or C's). Both groups felt they had learned from the course, but students who averaged "C's" found it a much less positive experience and were less likely to recommend it to their friends.

APPENDIX A

of

Sample Papers used in the English Evaluation

Level II

Project Advance Passing
Project Advance Failing
Syracuse University Passing
Syracuse University Failing

Level III

Project Advance Passing
Project Advance Failing
Syracuse University Passing
Syracuse University Failing

Passive Euthanasia, An Alternative

In our world today there is one thing which is inevitable, death. All people must die at sometime or other. There is a problem these days in deciding when this time is. With all the new drugs in the world today a person can be kept alive for a very long time, even if he is dying. What is the sense in doing this if the person is dying and in constant pain or he is a vegetable. There is no sense in prolonging life when a person is terminally ill like this or if he is a vegetable. In such cases passive euthansia is the only alternative.

Euthanasia, passive or active, is condemned by many religious and social organizations. Religious organizations feel that passive euthanasia is the taking of a life. The taking of a life is against the laws of God. Social organizations feel that passive euthanasia is murder. Murder is an act against humanity. This is all true, but how is a life being taken. A person who is a vegetable has already died, so his life is not being taken. A person who is dying and in pain, is not having his life ended. The only thing being ended is extra suffering. Passive euthanasia is not the ending of a life; it is the ending of extra suffering or waste.

Passive euthanasia relieves some of the suffering that a terminally ill person and his relatives go through. The relatives of a dying person are hurt to see a loved one getting ready to leave them forever. The pain felt is worst if the loved one is also in pain. An example of this is an old man who way dying and had been in the hospital for three months. The man was in constant pain. When ever his relatives came to see him he was in so much pain that he really could not communicate with them. This upset him terribly and it also upset his relatives. His relatives found it very hard to carry out their lives normally. They were constantly thinking of him and the agony he was in. Passive euthanasia would have relieved some of the agony of this situation.

Passive euthanasia is the only alternative in the case of a person who is a vegetable. A vegetable is not a living person. That thing which makes him a unique person is gone. There are many patients in hospitals around around the country who are like this. These patients have machines which function every part of their body. These machines are needed because the brains of these patients have cease to function. It is very expense and a waste to keep a person functioning like this. The space he is taking up in the hospital could be used for sick people who are alive and need it. Passive euthanasia would have prevented these situation.

Situations like the ones previously described could be avoided by the act of passive euthanasia. Prolonging the life of a dying person in pain is unmerciful. Keeping the body of a vegetable functioning is a waste. Passive euthanasia is the only way to end such situations. Passive euthanasia is one of the most merciful things in the world because it relieves suffering and waste.

Suicide: A sin or a right?

Although it is deemed an illegal act, by both church and state, suicide is the right of every individual. Today's society is always pushing a "more freedom" and "do your own thing" type of lifestyle. (Meaning that, everyone should be allowed to decide what to do with his or her life, even if it means ending it.)

Many people see suicide as a form of murder. Murder is one man killing, or causing the death of, another. Suicide is a killing of one's self. If one man kills another he is not taking into consideration whether or not that individual wanted to die. But, if a man takes his own life, he should know his own mind well enough to discern whether death is a desirable course for him.

The mental stability of a suicidal individual will always be in question. Does the person really have the facilitie to reach a thoughtful decision concerning his life? Besides, what normal, intelligent and well-adjusted human being wants to die. The answer: none of them! A person who is well adjusted should wish to remain living. The psychotic would not. Therefore, if these people do commit suicide, they would be doing humanity a favor by removing an unstable presence from a society that is striving for a common good.

The church does not condone suicide on the old Biblical grounds that, "God gave man life and only God should take it away." The clincher lies in the word "gave." Whey you give someone a gift you'd want them to utilize it in a way pleasing to them. You'd never stand over them and direct them to use it as you want them to. If God "gave" man life, then God should not mind if someone decides to end living. The clergy should accept that this was the way they decided to use their "gift."

Finally, the legal standpoint opposes anything any law or document, securing an individual's rights, ever written. What ever happened to "life, liberty and the pursuit of happiness"? (Life, to with as they chose. Liberty, to end it if they so desire. And, if suicide is that individual's way of pursing happiness then leave them alone. Otherwise, You are infringing on their rights. They are not killing another or removing someone else's life, they are making a definite decision concerning their own life.

In closing, let me say again that suicide should be the right of every individual. Any other course given us would be a direct attack on our rights. (In Shakespeare's words, "to be or not to be", that is a question only each man can answer for himself and have the right to decide upon.)

In this day and age many new ideals are replacing the old traditional ways of life. Industry, technology, and politics, are changing our lifes. One role in life that is undergoing change and becoming more liberalized is that of the woman in American society. Although women want equality with men; to be exactly the same and receive equal benefits, I feel the woman still does have a place in the home.

Any woman should be given the chance, that if she wants, she can get a good well paying job. It might even be necessary in some cases for a married woman to take on some kind of tempory job or part time job to help financial matters because of inflated costs of living. A tempory job should be telephone calling from her home or something to that nature. But the old accepted idea is that 'the husband will "support" the wife.' The husband should, unless he is disabled, bring home the "bread." The husband should be rewared by his wife's presence at the end of the day and be able to appreciate her home-cooked meal. With the woman out of the house, it is likely that neither the husband and wife will have time for each other. Thus, relations go down hill.

If all woman are given equal rights as most woman are striving for, they are also subject to the same requirements for the males in our society namely: the draft. The question then arises would women want to protect this country with their lives in case of a national disaster? Moreover, do woman qualify to be subject to draft board measures? To remain objective, I will not answer these questions, but I will say that women are probably safer staying home.

Women should have their say in legal matters like abortions. Women should also be given as many opportunities as the male has in being promoted in leadership. Woman should be able to get the jobs that they qualify for, but women, if they're married should also think of her place at home. If these woman are parents, they should be home even more so to bring up their children properly. The behavior of children originates in the home. It is of utmost importance to insure that the

future generations, future leaders of our world, live decent lives in their childhood and come from good families.

I concede that a womans' place is in the home. This theory leads to the tradition of the husband supporting the wife, the boy paying for the girl and the girl rewarding her male. In order to support this, the oldest of all traditions, let us keep the woman's place at home.

Syracuse University
Level II Failing

Big City--Small Town

Although to some people the big city life may seem like a gigantic mass of confusion, it is really a most wonderful place to dwel in. Because there are a varity of places to go, pelple to meet, and adventures to face.

In todays world people can decide for themselves what lifestyle they want. Whether to live in the big crowded city or the rural peaceful town. There are many advantages of lifing in a small town. In a small country atmosphere the people seem to be more friendly and sincere. You could have no place to eat and they "invite you over for dinner, no matter how poor they are. Because a great majority of small town people seem to have some things in a more gran mannor than city folks, and thats pride and neglect. Small town people try to always take of each other always doing things in their own lifestyle. to some people the big city life may seem a like a gigantic mess of confution, it is really a most wonderful place to life. Because their are a varity of places to go, people to meet, and adventures to face.

Big city lifestyle is most definitely the best in the world. You can always find something to do, any time of the day or night. There are so many movies and shows. you could go to three diferant shows every night of the week, for a month. In the city they have everykind of resterant from Arabiac, to Yougoslavian. There are so many people. Thus, giving you a chance to meet a wide varity of people and nationalities. The big city people are at times said not be friendly. That's untrue, there just the most friendly people in the world. The catch is you have to get to know them and act has if you have a brain on your shoulder. Because of cource if you act like an fool, people are not going to treat you right. Also there are so many adventures one faces everyday. Walking down crowded streets, playing England on 5th ave, or chicken with one of the city buses.

So as anybody can clearly see, city life can be most enjoyable. There are definetly more things to do and places to go in the city than the rural community. Life seems to always be at an above average pace. people always pushing and shoving on the over-crowded buses and trains. Such an unbelievably high crime rate, drunks, and drug fiend. All in all the big city is definitely the best place to life in the world.

"Comparison between Anabel Lee and On the Death of a Young Lady"

Poetry is a method of writing when the poet can express his feelings effectively without needing a plot or scheme. On the Death of a Young Lady by Lord Byron and Annabel Lee by Edgar Allan Poe are good examples of this. Both of these poems deal with the death of a loved one. Each poet, however, takes a different view of death, one takes a bitter attitude the other one of emptiness.

In On the Death of a Young Lady Lord Byron tells how the winds are hused and the evening still when he goes to put flowers on his cousin's grave. As he goes on in the poem he seems to sound bitter towards "The King of Terrors" for siezing her and taking her away. But he latter says there is no reason to weep over his cousins death because she has gone to a far better life in Heaven. At the end he tells of the empty spot in his heart for her love.

Poe on the other hand takes a much stronger attitude toward death in his poem Annabel Lee. Perhaps the reason Poe shows more bitterness towards the death of his loved one is because he seemed to have had a much stronger love than Byron did. This is mentioned in the first stanza where he says her only thought in life is "to love and he loved by me." In the second stanza he also states "we loved with a love that was more than love" another indication of his strong feeling toward her. He later states his bitterness in the lines "That the wind came out of the cloud, chilling and killing my Annabel Lee." He then goes on to say "But our love it was stronger by far than the love of those who were older than we." He also states that niether the angels nor the devils can take her soul from his another indication of his strong love for her.

Byron seems to face reality much better than Poe does. In Byrons poem he writes that there is no reason to weep over his loss because he realizes it is something that has to happen and it happens to all. Poe on the other hand seems to react immaturly to the situation. He doesn't seem to be able to face up to reallity. He shows this by using words that were more harsh than the words of Byron.

Both poets use terms commonly called "poetic devises." One such device used by both is rhyme. Lord Byron rhyme scheme is every other line through the whole poem. Poe starts out everyother line then goes to every two lines. The rhyme scheme is one that flows through the whole poem so its use in these poems is probably to get a smooth effect to show there passion.

Poe uses alot of repitition in his poem. He writes of "the land by the sea", and his "love for Annabel Lee." This repetition sticks in the reader's mind and

is the main theme of the poem. This repetion is very effective because it gets the reader's attention and more readily infers the purpose or meaning of the poem.

Another poetic device used by both poets is Caesura. Caesura is used through both poems at strategic spots to break the smooth flow of the peom's and make a point to the reader. An example of this in Byron's poem is "Whilst I return, to view my Margret's tomb," this give's the reader the first indication that Margret has died and that it is a poem about her death. Poe uses Caesura in the line "That the wind came out of a the cloud, chilling and killing my Annable Lee" to show a bitterness towards death.

There are other poetic devices used in both poems but none of them seem give a very significant meaning to the poem. The devises previously discussed in this paper seem to have the strongest effect on these two poems. Annabel Lee and On the Death of a Young Lady show how two poem's can be written on the same topic and through the use of poetic devices reflect two different attitudes.

"pity this busy monster, manunkind:

This dramatic poem by E.E. Cummings, which could be interpreted as his thoughts and ideas of our modern world, describe the world as a human ratrace. He shows these feelings by his choice of words. For example, instead of using the word mankind he uses the word manunkind and called it a busy monster in line one of the poem. In line two he describes progress as a comfortable disease. This may mean that it is easier to be caught up in the masses of people all working together to make this world an easier place to live. The third line could be thought of as to mean that you are young, but not an infant or a small child, and death is much to far off into the future. In lines 4-6 he uses words with opposite meanings. For example, he uses bigness and littleness to talk about the same thing. A person as an individual compared to another individual is beg yet a person as an individual compared to the masses of people is so little. E.E. Cummings also uses the words electron and mountainranges in the same sentence showing opposites in size.

Then Cummings changes from talking about the size and progress of mankind to talking about synthetic or man-made things. He says a world that is man-made is not a world that is born with the love and attention of a mother or natural things to surround it. The world pities the poor things that are natural such as trees, stars, stones, but never the fine specimen's that are hypermagical or man-made. Then he goes on to say that a docotr knows a hopeless case when he sees it, meaning we are doctors and our world is a hopeless case. His last lines say there is a better world so let's go. But is there a better world? Isn't it the people who make up the world and not the world we see. In this poem E.E. Cummings describes this world as a ratrace which is interested in material goods and false needs.

Metrical variation is used to stress the meanings that the author tries to put in his poem. The metrical variation of most of this poem is iambic pentameter also with some trochaic feet. This passage opens with a trochaic, and the next trochaic foot is not until the third line. Cummings creates a type of pattern in his poem where the trochaic variations are used to put stress on the word or sentence.

Many variations are also produced by E.E. Cummings free handling of sentence structure. For example, he does not begin all of his sentences with capital letters: the first word of the first sentence is not capitalized but it has a trochaic variation which puts the emphasis on the word: the second sentence

does start with a capital letter but the only other punctuation in that rather long sentence, are two colons. The third sentence like the second sentence started with a capital letter but like the first sentence it is punctuated with commas. The last sentence also has a colon in it, like the second, and is capitalized but there is no period to end the sentence as there was in the other three sentences. He might have left the period off the end to add emphasis or to make it noticeable. If he had added the period it would have ended the sentence therefore ending the thought which would have made the thought sound weak and it would have been as is it were just an idea that never got acted out. By leaving out the last punctuation it gave the idea a sort of open appeal. One can almost see the people deciding and making up their minds: some going, some staying.

Punctuation adds a great deal to the poem. It guides one while he reads the peom, it helps with understanding the poem and finding the stressed ideas that are the theme of the poem and it brings out the meanings in the words by where the punctuation is placed, how much is used, and what punctuation is used.

The author also uses sounds to add to the meaning and rhythm of his poem. There are two kinds of consonant sounds in this poem. They are the stop sounds (i.e., p,b,t,d,k,g) that are made by the momentary stopping and releasing of sound. Cummings uses these sounds throughout the poem with such words as pity, progress, victim, deify, razorblade, born, poor, trees, stars, stones. case, good, door, so. These are all words with harsh sounds. Also thereare the spirant or continuant sounds which are said almost with a rush of air (i.e. n,l,th,s,ch,z,j,sh,zh(cushion)). Some examples of these words are busy, bigness, with, unwish, through, where-when, flesh, this. The different way the author groups these words together and accents them and the way he uses them throughout the poem is what gives it meaning.

Another device that is used in poetry to bring out the meaning is assonance. There are many sounds throughout the poem that dominate different parts of the poem. The first example is the short i sound. When you say it out loud or to yourself it is sort of a sickly sound. It could be to show Cummings' feelings about all these people concerned with only themselves and their own progress and their common goal in life- to keep up with the rest of the rat-race. They strive to have a car like the Jones' or a color TV like the Smiths'. Another sound that goes nearly throughout the whole poem is the s sound. This sound has an onomatopoeic effect on the poem. The almost consistant s sound constantly reminds one of the busy scurrying people, the noise of the cars and busses and planes and maybe the sound of wind or rain or machines that are

commonplace in our commercialized world. There is also the liquid l sound that makes one think of certain machines (a duplicating machine) or other sounds that are everyday occurances in our world like the sound of water. Also there is the noticeable w sound. This could be created by the sounds of elevators constantly stopping and opening and closing their doors, or people whizzing by. There is also a p sound that reminds one of the tapping of typewriter keys by the way they are used in this poem. The underlying thought in this poem is our busy commercialized world and these sounds add to the effect of the poem. When they are repeated, as Cummings has done, they make us think of the sounds we hear everyday and we relate these sounds to the poem, which adds to the meaning and understanding of the poem.

Alliteration is also an obvious device in this poem and adds greatly to the meaning of the poem. Some examples are the recurrent p sounds in lines 1-4 (pity, progress, plays), the m's in line 1 (monster, manunkind), the d's in lines 2-5 (disease, death, deify), the l sounds in lines 3-6 (life, littleness, lenses) the u sound in lines 7 and 8 (unwish, unself), the n's in lines 11-15 (never, know, next), and the s's in lines 11 and 12 (stars, stones, specimen). All these sounds that repeatedly start at the beginning of words give one the effect of reminding him that his life constantly repeats itself. Day after day we go through the same routines and our lives are really in a rut. In his own way Cummings uses many devices to bring out these thoughts and views of our world.

This rather short poem by E.E. Cummings is filled with prosodic skill. The sounds and rhythm of the words and lines themselves, put into this poem actually speak along with the meaning: they empahsize the description of the world, of socity, and the people that make up the world and society. He talks of the world as a ratrace and the people in it as fortune hunters. Cummings called the people busy monsters and mankind was referred to as manunkind. In the second line he describes progress as a disease. Everybody has this disease--for that is one of our common goals. Everybody is trying to get ahead in this world. We are caught up in this goal and some of us will go to great extremes to reach it. Cummings also calls life and death a victim. It is like we are born into this mixed-up world but it will also be too bad when we have to die, but we do not have to worry about this for awhile because we are drifting and struggling somewhere in the middle of this cycle. Then he goes on to talk about our world of made. Everything in our world is mass produced without the love and sweat that goes into hand-made things. We do not have the time or patience to do these things and produce enough for all the people in our world. Cummings

says we doctors know a hopeless case--he must be referring to us as the doctors and our world as the hopeless case. We are all lost in our running around. In his last lines Cummings says there is a better world so let's go the grass always looks better somewhere else, but when we look back we find that it was not. Cummings uses many devices to bring out all the meaning in this poem. He uses such things as sound, alliteration, assonance, rhythm, accents and many others to bring out the full meaning and make it so understandable. He uses all these techniques to bring out the main thoughts in the poem.

Waiting for Godot by Samuel Beckett

In the play Waiting for Godot by Samuel Beckett it illustrates mans absurd life long waiting for something that will put meaning into his life. This point is brought across in the story through the two main characters; Vladimir and Estragon. This is even more so examplified by the appearance of Pozzo and Lucky on stage. Beckett's use of the same setting for both acts of the play shows that the waiting will never cease and that man will really never be satisfied. But perhaps the most significant part of this play is the speech. The absurd patterns and phrases continue to bring out the whole plot of Waiting for Godot. For in this speech one sees the hopelessness and despair of not having a goal in life and making the quest to find this goal ones life long obsession. Act I shows Vladmir and Estragon passing the time waiting for this person of esteem named Godot. Then comes Pozzo and Lucky as a distraction, the diversion for the time. This then resolves back to Vladimir and Estragon alone again knowing that they still have nothing to show for the day. This is again repeated in Act II but there is a difference. It being that Beckett has made a twenty-four hour time period a lifelong span. One which shows that life will go on and people will get older and roles will change but, beneath all of this is the same course in life.

In the play Waiting for Godot the two main characters are Estragon and Vladimir, referred to in the play respectivily as Gogo and Didi. They are portrayed in a variety of ways, as sich individuals, tramps and possibly as homosexuals. However Beckett leaves this choice to the individuals own thought. But despite their pathetic side a comical view appears. This is shown in the conversation:

Valdimir: One daren't even laugh any more.
Estragon: Dread privation.
Vladimir: Merely smile, It's not the same. Nothing to be done. Gogo.
Estragon: What is it?
Vladimir: Did you ever read the Bible?
Estragon: The Bible...I must have taken a look at it.
Vladimir: Do you remember the Gospels?
Estragon: I remember the map of the Holy Land. Coloured were. Very pretty. The Dead Sea was pale blue. The very look of it made me thirsty. That's where we'll go, I used to say, that's where we'll go for our honeymoon. We'll swim. We'll be happy. [1]

The point demonstrated in the excerpt is a comical one showing change from the seriousness of a conversation on smiling down to the comical way in which Estragon describes the Bible. Notice he does not mention characters of a Bible story but rather the childlike images as the color of the water etc.

Both Gogo's and Didi's mutural obsession in life is passing the time. But along with this neither really "want to face the suffering of being."[2] In other words though they are waiting for Godot as an answer to the future they are also waiting for the sake of waiting as an escape from the future. When faced with a simple problem they make it into a major event:

Vladimir: Do you want a carrot?
Estragon: Is that all there is?
Vladimir: I might have some turnips.
Estragon: Give me a carrot. (Vladimir rummages in his pockets, takes out turnip and gives it to Estragon who takes a bite out of it. Angerly.) It's a turnip!
Vladimir: Oh Pardon! I could have sworn it was a carrot.[3]

Didi and Gogo also revert to the use of rituals to combat the silence and emptyness. Conversations are constantly repeated for this reason. This also gives Gogo and Didi an inane sense of security. But also just the sound of their own voices gives them a reassurance of their own and each others existence. "The business of living for Didi and Gogo is a matter of filling up the gaping hole in time. It does not matter with what one fills or passes time so long as it is filled..."[4]

Vladimir: That passed the time.
Estragon: It would have passed in any case.
Vladimir: Yes, but not so rapidly.

To Vladimir and Estragon the wait for Godot brings frustration and despair which is underlyed with hope for the moment he does arrive. This adds balance to the apprehension.

The next characters introduced in Waiting for Godot, are Pozzo and Lucky. Pozzo appears in Act I as a self assured gentleman who appreciates the finer things of life. Lucky is his servant who is trained to do nothing but obey his master. By Pozzo whipping Lucky in this act is symbolizes the "signs of social order, oppression, slavery of working class, exploitation and inhumanity."[6] Lucky is a servant he does not speak, does not think, and really does not exist as a man unless directed to by Pozzo. Once directed though it is shown how Lucky is capable of the power to think and other natural functions of man. It is also implied that it was Lucky who taught Pozzo what he knows. The relationship between Pozzo and Lucky can be seen as a struggle between the classes.

Lucky can not be accepted into society because he was not born into society. It can also be shown as "a psychological symbolism Pozzo as the sadist and Lucky as the masochist."[7] Lucky's desire to be tortured is shown by his rejection of Gogo when offered help. Also his devoted attention to his master to the point where it is physically damaging to him.

Act II however brings about change. Pozzo now blind relies on Lucky for life. Pozzo is no longer in control of the situation, he needs help in everything he does.

Vladimir: Perhaps we should help him first.
Estragon: To do what?
Vladimir: To get up.
Estragon: He can't get up?
Vladimir: He wants to get up.
Estragon: Then let him get up.
Vladimir: He can't.[8]

It is also shown in this act how Lucky is leading Pozzo and that they are even now still bound together but in a less socially critical way. The end of Pozzo is one of complete decay with Pozzo falling to bits, helpless. And Lucky slowly going down with Pozzo. Because Lucky had no ambitions to finally break away and find a life of his own.

The setting of the play is pertinent to the play as a whole. The tree found in Acts I and II is associated with Gogo and Didi for they are simply vegetating like the tree. But the tree can also resemble time passing by. For in Act I the tree is bare while in Act II it has 5 leaves. Yet another meaning for the tree is its constant escape from life. The tree poses an escape for Vladimir and Estragon when they become dejected and no longer feel it worthwhile to wait. The tree becomes their means of escape by suicide. It is shown in both Act I and II how this idea has toyed in their mind. Though it does not occur during the course of the play. It leaves the reader to wonder if it will not be the eventual end.

The road is also important it is shown as a form of escape, the other way out. It can also be related to Pozzo and Lucky for they are the ones who travel it and have found a life style from it. They are recognized as the active ones who are constantly on the go. Like the road.

The structure of Waiting for Godot is quite unusual in the first Act it is shown how Vladimir and Estragon are passing the time waiting for Godot. Then enter Pozzo and Lucky and pass through. Vladimir and Estragon then get messages from Godot that he will not show. They then decide to return the next day and wait again. This identical format is then repeated in Act II showing the beginning

of the play as the end and the end as the beginning. This leaves the reader with the impression that this shall continue infinately with no real solution to anything ever occurring.

In the play Waiting for Godot time is the common enemy. To each character it brings something else. To Pozzo time only brings loss and decay. This is illustrated by the loss of his pipe, vaporizer, watch and by the end of the play sight and dignity are also added to this list. To Lucky it brings no relieve from slavery and one receives the impression that this shall be his course of life. And finally to Didi and Gogo it brings frustration and brief interludes in the tedious wait for Godot.

Vladimir: That passes the time.
Estragon: It would have passed in any case.
Vladimir: Yes but not so rapidly
Estragon: What do we do now?
Vladimir: I don't know
Estragon: Let's go
Vladimir: We can't
Estragon: Why not?
Vladimir: We're waiting for Godot
Estragon: (desparingly) Ah...[9]

As shown in the above conversation Gogo and Didi quickly return to their plight after the diversion of Pozzo and Lucky passed. But another point can be seen in the conversation. It has now taken on the role of a game and continues this way through most of the play. They are using this as a form of escape to pass the time of waiting, they can no longer endure the waiting.

The subject of the play shows again how Didi and Gogo try to pass the time given the fact that the situation is hopeless. "Time and space become void and any particular time is just a compartment in the emptyness."[10]

Estragon: What do we do now?
Vladimir: While waiting
Estragon: While waiting
Vladimir: We could do our exercises
Estragon: Our movements
Vladimir: Our elevations
Estragon: Our relaxations
Vladimir: OUr elongations
Estragon: Our relaxations
Vladimir: To warm us up
Estragon: To calm us down
Vladimir: Off we go.[11]

This is showing how they do not actually do the exercises physically but rather make them into a mental exercise to use as a brief relief from the boredom of waiting. They constantly maintain dialoges even when there is nothing left to say.

One also realizes that by the end of the play that Estragon can not remember anything for more than two minutes, and can refer back no further than the last phrase mentioned.

Vladimir: The tree, look at the tree.
Estragon: Was it not there yesterday?
Vladimir: Yes of course it was there. Do you not remember? But you wouldn't. Do you not remember?
Estragon: You dreamt it.
Vladimir: Is it possible you've forgotten already?
Estragon: That's the way I am. Either I forget immediately or never forget.
Vladimir: And Pozzo and Lucky, have you forgotten them too?
Estragon: Pozzo and Lucky?
Vladimir: He's forgotten everything![12]

Vladimir's frustration toward Estragon has become quite apparent at this point. It is also shown how he has no mind of his own and in a subconscious way is depending on Vladimir for all his thinking.

Vladimir: Say you are, even if it's not true
Estragon: What am I to say?
Vladimir: Say, I am happy.
Estragon: I am happy.
Vladimir: So am I.
Estragon: So am I.
Vladimir: We are happy
Estragon: We are happy...[13]

This is also showing how Estragon is constantly trying to Please Vladimir. Estragon is hoping by saying this it will actually make it happen.

It appears that a blanket of boredom has enveloped every event and word the second it happens or is spoken. Estragon reply to each appeal is a variation of "Don't ask me. I am not a historian" where Vladimir's constant refrain appears to be "try and remember". It is becoming apparent the feeling of desparation that is engulfing Vladimir. That he is no longer just satisfied with waiting but, there is no escape either. Vladimir is now becoming unsure if he is really sane or not and looks for reassurance in the boy messenger.

Valdimir: Tell him...tell him you saw me and that... that you saw me. You are sure you saw me," you won't come and tell me tomorrow that you never saw me![14]

Also the fact that Pozzo no longer remembers him from yesterday has put this doubt in Vladimir's mind. He is no longer sure exactly what and where he is and what has occurred and what has not.

Pozzo: I don't remember having met anyone yesterday. But to-morrow I won't remember having met anyone today. So don't count on me to enlighten you.[15]

But perhaps the whole situation of time is best summed up by Pozzo telling

Vladimir that life changes from day to day and what may seem real is not always so.

> Pozzo: Have you not done tormenting me with your accursed time! It's abominable! When! When! One day, is that not enough for you, one day he went dumb, one day I went blind, one day we'll go deaf, one day we were born, one day we shall die, the same day, the same second, is that not enough for you? they give birth astride of a grave, the light gleams an instant, then it's night once more...[16]

Vladimir thinks about what Pozzo has said and comes up with the conclusion that Pozzo is right.

> Vladimir: What I sleeping, while others suffered? Am I sleeping now? To-morrow, when I wake, or think I do, what shall I say of to-day? That with Estragon my friend, at this place, until the fall of night, I waited for Godot. That Pozzo passed with his carrier, and that he spoke to us? Probably. But in all that what truth will there be... Astride of a grave and a difficult birth. Down in the hole, lingeringly, the grave-digger puts on the forceps. We have time to grow old. The air is full of our cries. But habit is a great deadener. At me too someone is liking, of me too someone is saying, He is sleeping, he knows nothing, let him sleep on.[17]

Pozzo and Vladimir have now become alike in many ways they have both enter the "perilous zone...when for a moment the boredom of living is replaced by the suffering of being."[18] Neither of them like what they see but they both realize there is nothing to be done.

The character of Godot is never really defined in the play. Some critics believe his to be G-d. But it is more likely that he is just a symbol of Vladimir and Estragon's future. He is the object that they shall never really meet up with. They have transformed Godot into their life and he is the success or failure that will follow in the future. The waiting for Godot has created the whole mood of the play. Beckett has made Waiting for Godot into a tension sequence which follow throughout the play and even by the end still does not release itself. Along with the tension there is a general sense of boredom which is periodically relieved by the appearance of Pozzo and Lucky. But after their emergence once again it reverts back to the bordom caused by the waiting for Godot. But one begins to wonder if Vladimir and Estragon are not just waiting for the sake of waiting.

> Vladimir: We are no longer alone waiting for the night, waiting for Godot, waiting for...waiting...[19]

Waiting for Godot finally ends with the play reverting back to the beginning with the same suicide scene as in Act I repeated.

Estragon: Why don't we hang ourselves?
Vladimir: With what?
Estragon: You haven't got a bit of rope?
Vladimir: No
Estragon: Then we can't
Vladimir: Let's go
Estragon: Wait, there's my belt
Vladimir: It's too short
Estragon: You could hang on to my legs
Vladimir: And who'd hang on to mine?
Estragon: True.[20]

This has become their path of life the hopeless and endless waiting for Godot with the only change in life in ending life. Vladimir and Estragon both know what this shall never end and tomorrow will be the same. For them tomorrows will always be the same.

Vladimir: Well? Shall we go?
Estragon: Yes, Let's go. (They do not move)[21]

In conclusion the play Waiting for Godot is a symbol of things that will happen to the two characters Valdimir and Estragon. It is the hopless waiting for something that will never come and the endless anticipation that maybe some day it may come. Throughout the play there is a underlying feeling that Vladimir and Estragon know that Godot will never really come. But for them to give up hoping that he will come would be a sentence of death. It would leave them without the option of waiting even if it is for the sake of waiting. The characters of Pozzo and Lucky are a forewarning to Gogo and Didi. They are there to emphasize the fact that what appears true today will not necessarily be true tomorrow. The decay and falling of Pozzo helps Valdimir realize what life really is but before he can really put it to use he is again thrown back into the environment of his absurd way of life. With his obligations to Estragon and the endless hope that someday they both will be able to halt their waiting for Godot.

ENDNOTES

[1] Samuel Beckett, Waiting for Godot (New York: Grover Press Inc.) P. 8a

[2] A. Alvarez, Beckett p. 87

[3] Beckett, p. 14

[4] David H. Hesla, The Shape of Chaos (Minneapolis: The U. Of Minnesota Press) p. 132

[5] Beckett, p.

[6] Francis Doherty, Samuel Beckett p. 91

[7] Doherty, p. 91

[8] Beckett, p. 50a

[9] Beckett, p. 31a-32

[10] Hesla, P. 133

[11] Beckett, p. 49

[12] Beckett., p. 39-39a

[13] Beckett, p. 59

[14] Beckett, p. 56a-57

[15] Beckett. p. 57a

[16] Beckett p. 58

[17] Alvarez, P. 88

[18] Beckett, p. 50

[19] Beckett, p. 39

[20] Beckett p. 60a

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PATTERNS IN HOLMES

The pattern in Sir Arthur Doyle's adventures involving Sherlock Holmes seem to vary slightly in each story. Holmes finds himself a problem or an unsolved mystery, and approaches it by "science of deduction" With this great ability of deduction, Sherlock and Dr. Watson, solve most, rather all of the mysteries. In grouping all the stories, a similar pattern is discovered in Sherlock Holmes approach and methods of solving mystery. Although Doyles stories vary slightly, "The Adventure of the Blue Carbunnle" and "A Scandal in Bohemia," follow one kind of pattern in being solved by Sherlock Holmes.

"The Adventure of the Blue Carbuncle" begins with a friend of Holmes, Peterson witnesses a fight. The man involved in the fight, in defending himself, smashes a store window. His fear of an oncoming officier brings him to drop his Christmas goose and hat. Petterson picks up the goose and the hat and takes them to Holmes, along with the story of what he saw. In looking at the hat, Holmes notices clues enabling him to deduct what kind of man owns the hat, and other personnal clues. He found him to be wealthy in his past, without a wife, probable separated or presently divorsed, and cleaned shavened.

Dr. Watson flabergasted by Holmes discoveries over the hat, agrees to join in the search for the mystery man. Once decided, Petterson storms into Sherlock's home gasping about the discovery of a blue stone found in the crop of the goose. Holmes then recalled the many articles in the newspaper concerning a missing carbuncle belonging to the countess of Morcar. Realizing whoever dropped the bird and hat must have stollen the stone, Holmes places a lost and found ad in many of the local newspapers. The purpose of this is to corner the thief. He'll recognize the ad for the hat and retrieve both thinking that since the goose hasn't been cooked yet, that the founders have not as yet found the gem. Unfortunately for the robber, Holmes told Petterson to eat the goose and he'll get another.

6:30, Holmes' doorbell rings and in comes a man asking about the bird and hat. Watson returns the hat as Sherlock explains that the goose was cooked as it would have gone bad. Baker, the owner, jumps at the news, but calms back down after Holmes tells him of the other bird that he purchaced. Sherlock and Watson both realize that this is not the robber as the robber would have still been upset even after being offered another bird.

In tracing back the past owner of the goose, Holmes, through questioning Mr. Baker finds that the bird was purchased from the Alpha Inn. The next morning, both men visit the inn. Making inquiries about the selling of the geese, they

find that the inn dealer bought them from the Covert Gardens. Holmes and Watson, travel once more, this time to the Garden finding two men argueing about the geese.

Sherlock on a wild note uses his wit, and interupts the conversation saying that he could help the customer. Sherlock proceeds to ask the man his name. Seeing through a possible front, Holmes asks for his real name. On the assumption that the man is involved, Holmes proceeds to let the man know that he knows what he wants. Holmes continues with his fetched thoughts and makes accusations and comments that did indeed hit theman in the right places. The man finally confides in Holmes and tells them the complete story of how the gem got to where it did. Sherlock when hearing the story remembers tracing the same steps, only in the opposite direction. As Holmes isn't involved with the police, Sherlock tells the man to "get out," another words, he's not going to turn the man in.

"A Scandal in Bohemia" follows basically the same pattern as "The Adventure of the Blue Carbuncle." Holmes finds a problem and for him to solve it he uses assumptions and great wits and logic. In this story, Sherlock receives a mysterious letter saying that a man will visit Holmes on Royal business. Holmes, following the same pattern as in the previous story, analyses the note, seeing where it cam from, who wrote it, and the kind of Royalty that needed Holmes help. He finds the note paper to be from Bohemia, and the man who wrote it from Germany.

At 7:45, as the note said, a huge man clals on Holmes. Six foot six inches, with a chest and limbs like Hercules; the mystery man walks in with a mask on his head. He states that he represents the king of Bohemia, who at the moment is being blackmailed and needs Holmes help. Sherlock, with his great wit, uses an assumption and calls the mysterious man, "his majesty." The man in amazement confesses and removes his black mask. Explaining his reasons, Holmes and Watson agree in taking the case. It seems that the king's getting married to a woman in Roylaty. A previous relationship of the king has caused this blackmail. It's the girl who's blackmailing him with a picture of the two past lovers. Holme's job is to get the picture back from the girl, who realizes that the king want, the picture.

Holmes beings his investigation by watching and asking about the blackmailing young lady. Her name's Irene Adler, and she goes out at 5 and comes in again at 7:00, seven days a week. She also has a boyfriend by the name of Norman, who comes to visit at least twice a day. Holmes next dresses as a groom and follows the young lady on one of her ventures. She's goes to a church. Soon after, her boyfriend arrives. He stood in the rear of the church as he saw that the two were to be married. Lacking a witness, both turned and not knowing who

or why this man was in the back of the church, they asked him to come forward and help them. After the short wedding ceremony, both the man and woman left the same way they came, alone. Holmes questions this entire approach, along with the fact of why would Miss Adler want to keep a picture to blackmail if she is now married and very content.

Sherlock, then takes his next plan of action by asking Watson when inside Miss Adler's house, to throw a smoke bomb in the window when he raises his hand. Dr. Watson then watches Sherlock, run into the middle of a quarrel where Miss Adler's guardsmen were argueing. Making as if to break up the fight, Holmes fell to the ground with blood flowing from his head. He then is carried inside where he's placed on a couch; his hand goes up, the bomb explodes, and Sherlock yells fire. Miss Adler runs to a door panel and Holmes then yells that the fire is just a false alarm. Feeling fine, Mr. Holmes leaves Irene's house.

Once outside, Watson meets Holmes. Sherlock then tells him of the picture and admitts to staging the fight, with ketchup blood. Watson, unable to see how Holmes found the picture, asks; He states that when people find that a disaster is accuring and that their belongings may be destroyed, they usually run and try to save whats dear and important to them. Shortly afterwards, a message is left at Holmes house from Irene Adler. She says that she was warned about him and his investigation and if anyone could get the picture, Holmes could. She admitts that the trick worked as he has the photograph.

"The Adventure of the Blue Carbuncle" and "A Scandal in Bohemia," both follow a similar pattern. In both these stories, "science of deduction" is used. Holmes narrows the mysteries down to one or two possibilities and from there solves the problems at hand. In each case, he also takes evidence and analyses it perfectly. In each case he also knows what the people are thinking. In using his wits and deduction, Holmes is able to solve his clients cases.

EVALUATION OF PROJECT ADVANCE PSYCHOLOGY

a. The Equivalency of Student Performance Between Project Advance and Syracuse University

b. Student Ratings of Project Advance Psychology

David Chapman

EVALUATION OF PROJECT ADVANCE PSYCHOLOGY

The purpose of this evaluation was to compare the performance of students in Project Advance Psychology 205 and students in Psychology 205 at Syracuse University. This report is divided into three parts, a description of the course and how it operates, a comparison of students' scores on- and off-campus, and a report of student ratings of the course.

A Description of Psychology 205

Psychology 205, Foundations of Human Behavior, is a one semester self-paced course emphasizing mastery learning in which the student can earn three hours of Syracuse University credit. The course is divided into seven modules of content which cover specific topics in psychology. These basic, or required, modules are presented in sequence and students are encouraged to complete them during the first half of the course though they may take longer if necessary. Passing a required module is prerequisite for taking associated optional topics. Working simultaneously on required modules and optional units is allowed. The lecture and classroom activities in the course cover basic information contained in the various modules and provide opportunity for additional classroom discussion (see Figure 1 for an outline of this course).

Each student moves through the course at his own pace since the course emphasizes mastery of each unit rather than the traditional approach of covering the material at a fixed rate and allowing a varying level of proficiency. A student's final grade is determined by how many points he or she earns during a semester.

During the 1974-75 academic year, Foundations of Human Behavior was offered through Project Advance in 16 high schools to about 680 students. During the spring semester this psychology course was also offered as a freshman level course on the Syracuse University campus to a total enrollment of about 200 students. One other campus course will be discussed in this evaluation; one section of Psychology 205 was taught during the fall using a more traditional comparison, lecture method. It has been included in this study for purposes of comparison.

Procedure and Results

A comparison of student performance between students in Project Advance Psychology and that same course at Syracuse University was made at ten points through the course--a pre- and post-test, a midterm, and each of seven required modules.

At the beginning of the academic year, the faculty working with the course selected sixty items from tests used during the preceding year. Items were selected to represent the various content areas of the course and on their ability to discriminate among students. A Survey Test was developed using these sixty items and was administered to students on a pre- and post-test basis. The pre-test was given during the first week of classes, both in high schools and on-campus. Students completed the post-test during the last week of classes. A student's score on these tests did not count toward his grade in the course.

The midterm examination was a point in the course at which all students had covered the same material. The test itself consisted of fifty multiple choice items selected from those used on the previous unit tests. The midterm was not a test of mastery per se, but rather a review of earlier units. The examination was not graded; rather, the points a student earned on the examination were simply pooled with his overall average. The treatment of the examination on- and off-campus differed in one major respect. The examination was mandatory for students in Project Advance; it was optional for students on-campus. In practice, most university students did take the test, since points on the examination could only help a student's average; low scores did not work against a student.

Each of the module tests consisted of 40 items covering the content of the particular unit. Students who did not attain a score indicating mastery had to continue working on that unit and could be retested using an alternative form.

Two problems were encountered in the evaluation. First, some students did not indicate the module number on their answer sheet. Without this, their responses could not be included in the summary. This accounts for the missing or low rate of response from some schools on certain modules. Secondly, due to confusion over the date on which classes ended in the high school, the second semester post-test was not received in most schools in time to be administered. Hence, most post-test responses are from the first semester.

The results of the comparison of student performance on- and off-campus are shown in Table 1. High school students taking Psychology 205 through Project Advance and Syracuse University students taking the same course on-campus

TABLE 1

Student Performance in Syracuse University Project Advance Psychology

	Syracuse University Fall Semester			Project Advance Fall Semester			Syracuse University Spring Semester			Project Advance Spring Semester		
	Mean	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
Pre-Test	24.7	5.79	154	25.4	6.63		24.8	6.36	121			
Post-Test	33.46	5.99	108	39.8	8.02	369	43.4	6.19	63			
Module 1 (Psychology as a Behavioral Science)				24.8	6.45	391	30.8	4.92	132	28.8	6.91	91
Module 2 (Learning)				22.9	7.24	283	22.9	4.88	104	22.3	6.05	56
										20.3	5.90	145
Module 3 (Physiology)				28.8	6.62	311	27.6	6.51	58			
							28.9	6.76	54	27.3	7.06	229
Module 4 (Personality)				25.7	6.62	354	28.8	5.88	100	27.1	7.01	218
Module 5 (Abnormal)				31.1	5.93	265	30.4	6.04	44	28.3	6.03	77
							31.0	5.83	42	30.5	4.69	134
Module 6 (Child Development)				28.2	5.56	289	29.5	5.10	64	23.5	3.69	144
										26.7	5.44	64
Module 7 (Social Psychology)				27.6	8.13	217	26.9	4.74	58	27.0	4.46	93
										28.7	6.73	101
Midterm				32.8	6.09	208	30.2	5.5[illegible]	83			

TABLE 2

Fall 1974-75
Psychology Module Tests
Scores by High School

Module

School	1	2	3	4	5	6	7	Midterm	Pre-test	Post-test
A	10.4 (28)	25.2 (23)	28.6 (27)	16.0 (5)	28.1 (27)	25.0 (30	32.0 (20)	29.4 (28)		
B	—	—	—	—	—	—	18.7 (27)	34.9 (17)		
C	25.7 (23)	24.6 (20)	27.5 (23)	23.8 (20)	—	—	—	—		
D	25.3 (80)	18.6 (44)	—	23.5 (67)	—	27.4 (66)	—	—		
E	27.5 (11)	29.4 (13)	29.4 (13)	28.2 (11)	34.5 (2)	31.0 (5)	—	—		
F	22.1 (23)	26.2 (22)	26.2 (22)	—	—	—	—	—		
G	24.0 (24)	21.3 (13)	27.0 (11)	21.5 (22)	27.5 (16)	27.8 (12)	28.0 (13)	32.3 (14)		
H	24.5 (28)	26.4 (25)	26.4 (25)	23.7 (23)	30.0 (19)	27.2 (23)	27.2 (23)	34.6 (17)		
I	—	28.5 (34)	28.5 (34)	30.1 (29)	34.0 (27)	—	30.8 (24)	36.3 (3)		
J	24.1 (19)	26.5 (18)	26.5 (18)	22.7 (18)	27.7 (19)	25.4 (16)	25.4 (16)	29.1 (17)		
K	27.0 (22)	24.5 (23)	33.1 (22)	29.0 (23)	31.4 (21)	—	—	—		
L	26.5 (22)	24.9 (28)	33.5 (29)	27.0 (29)	31.7 (29)	30.2 (29)	30.2 (31)	34.7 (29)		
M	26.0 (53)	21.4 (52)	28.4 (53)	25.7 (53)	29.9 (53)	26.7 (52)	25.2 (52)	31.9 (53)		
N	31.6 (24)	—	—	32.0 (23)	35.2 (21)	—	—	—		
O	28.0 (31)	29.6 (30)	29.1 (31)	26.5 (31)	26.5 (31)	33.9 (31)	32.8 (31)	35.2 (28)		
All Schools Combined	24.8 (391)	23.0 (282)	28.8 (311)	25.7 (354)	31.1 (265)	28.2 (289)	26.6 (171)	32.8 (208)		

Failing papers were not included

TABLE 3

Spring 1974-75
Psychology Module Tests
Scores by High School

School	Module 1	2	3	4	5	6	7	Midterm	Pre-Test
D	--	18.0 (10)	25.0 (39)	26.6 (37)	28.0 (40)	25.3 (38)	27.3 (41)		
F	31.1 (7)	21.0 (20)	26.2 (20)	27.2 (15)	31.0 (14)	23.4 (12)	27.9 (10)		
G	30.5 (17)	22.6 (20)	24.6 (16)	27.8 (16)	27.6 (13)	22.5 (11)	24.1 (8)		
H	29.6 (14)	18.5 (15)	28.7 (13)	26.7 (16)	29.6 (9)	22.8 (11)	26.0 (11)		
I	--	22.8 (6)	30.3 (16)	27.9 (16)	30.1 (16)	23.8 (15)	27.6 (9)		
J	28.9 (19)	21.5 (17)	28.4 (15)	23.6 (17)	29.1 (14)	23.2 (16)	28.4 (18)		
M	--	19.0 (42)	24.0 (43)	24.6 (43)	28.0 (41)	22.9 (40)	27.2 (39)		
P	--	21.0 (31)	30.2 (27)	25.9 (20)	31.6 (26)	28.6 (26)	28.1 (16)		
O	--	24.6 (38)	30.7 (40)	32.2 (39)	32.4 (38)	25.0 (36)	32.4 (35)		
All Schools Combined	28.8 (91)	22.3 (56) 20.3 (145)	27.3 (229)	27.1 (218)	28.3 (77) 30.5 (134)	23.5 (144) 26.7 (64)	27.0 (93) 28.7 (101)		

were nearly equal in their performance, as measured by their scores at ten test points.

Tables 2 and 3 show the distribution across schools during the fall and spring semesters respectively. Overall, they suggest that student performance from school to school was quite consistent.

The comparison of the self-paced sections (Project Advance and second semester on-campus) and the more traditional lecture section (first semester on-campus) shows a substantially greater gain in score between pre- and post-testing for the self-paced sections. This would tend to support the mastery approach used in the course. An alternative explanation is that the content of the lecture and self-paced sections differed. While the psychology faculty perceive the contents to be rather similar, the findings may relate to the differences in content emphasis between the two types of sections.

Student Ratings of Project Advance Psychology

A concern common to those involved with the course was the student expectations as they enter the course and their ratings of the course after they had completed it. This information was collected using the Adjective Rating Scale which was given once at the beginning of the course and again at the end. In addition, on the course questionnaire students responded to sixteen other questions about the course. This section reports the results of these questionnaires and offers some interpretation of the project wide data. Lastly, this section examines how students differed in their performance in this course differed in their ratings of the course.

Adjective Rating Scale

The ARS was developed at the Syracuse University Center for Instructional Development (Kelly and Greco, 1975) as a measure of student attitude toward college courses. Project Advance English students completed it twice, once at the beginning of the fall semester asking students to rate what they expected from the course, and again at the end of the course asking students what they had found. Comparing these ratings helps answer the question, "Do students enrolled in Project Advance English have reasonably accurate expectations of the course?" Table 4 reports student pre-course expectations and post-course ratings.

These ratings can be condensed into four "clusters" of words, (that is, words that relate to each other) using factor analysis. When students tend to rate one word in a cluster high, they tend to also rate other words in that cluster high (or low, if the work is negatively related to the cluster). For example, in the first cluster below, students who rated a course "interesting"

TABLE 4

Student Ratings of Project Advance Psychology on the Adjective Rating Scale in Response to the Statement " (I (expect/found) this course in Project Advance to be _____."

(Reported as percent of students responding)

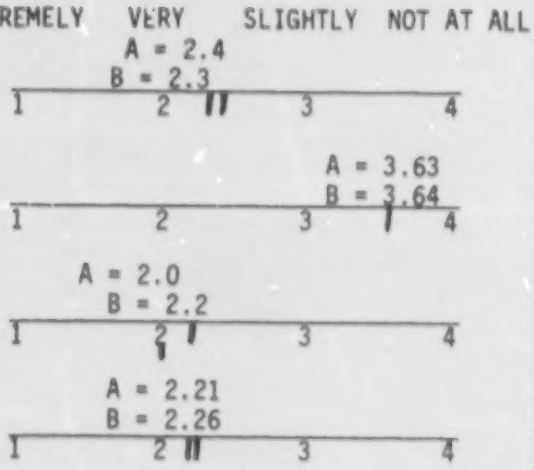
	Pre-Course Expectations First Semester Project Advance Psychology--Overall (N = 356)		End of Course Ratings Second Semester Project Advance Psychology--Overall (N = 212)	
	extremely/ very	slightly/ not at all	extremely/ very	slightly/ not at all
Interesting	91.3	8.7	86.0	13.9
Boring	4.0	96.0	4.4	95.6
Relevant	86.4	13.5	83.2	16.8
Informative	96.7	3.3	94.8	5.3
Difficult	38.7	61.2	29.4	70.7
Good	89.2	10.7	85.9	14.0
Stimulating	73.8	26.2	61.1	39.0
Irrelevant	4.4	95.6	3.9	96.1
Worthwhile	92.9	7.1	85.1	14.9
Valuable	89.6	10.4	77.9	22.1
Necessary	42.1	57.9	39.5	60.5
Dull	6.0	94.0	7.3	92.7
Challenging	81.7	18.4	71.2	28.9
A Waste	3.2	96.8	2.0	98.0
Practical	75.8	24.2	68.3	31.7
Demanding	62.9	47.0	59.2	40.8
Different	71.0	29.0	76.4	23.6
Enjoyable	71.8	28.2	69.1	30.9
Enlightening	83.1	16.9	77.7	22.2
Exciting	54.3	46.7	35.8	64.2
Rewarding	78.0	22.0	62.4	37.6
Provocative	50.3	49.7	53.9	47.1
General	17.4	82.6	24.4	75.7
Useless	3.3	96.7	2.5	97.5

tended to also rate the course "stimulating" and not (-) "boring" or "dull." Each cluster can be treated as a single idea and can be assigned a single score (an average of the individual item scores). By examining the words that form each cluster, the reader can give each cluster a label. For example, Cluster 4 might be labeled Difficulty.

Student Ratings of Project Advance Psychology Along
Four Adjective Clusters (from the Adjective Rating Scale)

A) Pre-Course Rating--Project Advance Overall--Fall 1974
B) Post-Course Rating--Project Advance Overall--Spring 1975

Clusters



* A minus (-) sign indicates that this word is rated lower as the other words are rated higher (i.e., (-) boring = not boring, (-) dull = not dull).

Overall, the differences between student expectations and post-course ratings are not striking. The reader is encouraged to develop his own labels for the four clusters. For purposes of this discussion, they might be labeled "Interest Value," "Dullness," "Practical Appeal," and "Difficulty," respectively. Overall, students rated the course to have somewhat greater Interest Value and somewhat less Practic Appeal and to be somewhat less Difficult than expected. They did not expect nor did they rate the course to be dull.

Student Responses to Other Questions

In addition to the Adjective Rating Scale, students at the end of the course were asked to respond to 18 other questions regarding Project Advance Psychology.

All things considered, this course was

	Percent of Student Responses
excellent	32.2
good	56.9
fair	9.0
poor	1.9

Overall, how would you rate the interest level of the class discussions in this course?

extremely interesting	8.1
interesting	49.8
dull	11.8
really dull	4.7
does not apply	25.6

Overall, how would you rate the interest level of the lectures in this course?

extremely interesting	8.1
interesting	51.2
dull	11.8
really dull	4.7
does not apply	25.1

Overall, how would you describe the readings in this course?

very beneficial	22.9
adequate	45.5
confusing	23.7
a waste of time	.5

Generally, how would you describe the work load required by this course?

very excessive	9.1
heavy	36.4
just right	49.8
rather light	4.8

Rate the fairness of the tests (psychology only).

a)	very fair; well matched with what was taught	20.0
b)	fair; generally but not always matched with what was taught	61.4
c)	somewhat unfair; frequently tested things I think were taught or required	17.6
d)	very unfair; tests had little or no relevance to what was taught	1.0

Rate the fairness of the college grading procedure (the assignment of letter grades that were used in this course).

excellent	32.2
good	55.3
fair	10.6
poor	1.9

Materials for this course were available when I needed them.

always	72.5
usually	25.6
rarely	.9
never	.9

Some Observations and Comments

1. Overall, student ratings of Project Advance Psychology were overwhelmingly positive.
2. Within that positive range, students more often rated the course "good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale, though the top two categories were collapsed for easier reading.
3. Across the high schools, students were quite consistent.
4. Few large differences were observed between pre-course expectations and post-course ratings. However, where shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be.

These data help answer an additional question: How did students who differed in their achievement in Project Advance Psychology differ in their ratings of that course? One aspect of that question is: Did students who did not do as well still find the course to be a positive and worthwhile experience? The following table (Table 5) compares the ratings of students who earned "A's" and those who earned "C's" across selected items on the course evaluation-questionnaire.

TABLE 5

Comparison of Project Advance Psychology Course Ratings Between Students Who Earned "A's" and Those Who Earned "C's" During Second Semester 1974-75

Questionnaire Items	Responses	Students Earning "A" (N = 104)	Students Earning "C" (N = 38)
All things considered, this course was	excellent/good	96.2	86.8
	fair/poor	3.8	13.2
Overall, how would you rate the interest value of the class discussion in this course?	extremely/interesting	78.0	63.2
	dull/really dull	22.0	36.8
Overall, how would you describe the readings in this course?	very beneficial/adequate	87.5	55.3
	Confusing/a waste of time	12.5	44.7 (all rated "confusing")
Generally, how would you describe the work load required by these courses?	very excessive/heavy	38.8	57.9
	just right/rather light	61.2	42.1
Rate the fairness of the tests.	Very fair; well matched with what was taught/ Fair; generally but not always matched with what was taught	76.3	83.8
	Somewhat unfair; frequently tested things I didn't think were taught or required/ Very unfair; tests had little or no relevance to what was taught	15.4	16.2
Rate the fairness of the college grading procedure.	excellent/good	91.2	92.1
	fair/poor	8.8	7.9
Materials for this course were available when I needed them.	always/usually	99.0	100.0
	rarely/never	1.0	0.0
Was this course an enjoyable experience for you?	always/frequently	84.6	75.7
	occasionally/never	15.4	24.3
On the whole, how much do you think you learned?	a great deal/some	74.0	94.6
	not very much/nothing	26.0	5.4
Rate the adequacy of your opportunity to meet directly with your teacher.	excellent/good	96.1	97.3
	fair/good	3.9	2.7
Would you recommend this course to your best friend?	yes	100.0	86.1
	no	0.0	13.9

Students who differed in their grade for the course differed only slightly in their ratings of the course. The most marked difference was students' ratings of the readings--45 percent of the "C" students found the readings to be confusing versus only 13 percent of the "A" students. Likewise, "C" students found the workload to be much heavier than did the "A" students. These results suggest that students who are not strong readers should be cautioned about enrolling in Project Advance Psychology. Poorer readers tend to find the readings very difficult and the workload quite heavy. More on this subject is presented in the following report by Kosoff, "An Assessment of the Readability of Text Materials in Project Advance Psychology."

Another difference among groups is that "C" students found the tests to be somewhat more fair than students who received "A's." Students in both groups rated the college grading procedures to be very fair. Moreover, all students found materials available when needed and almost all students were very positive about the adequacy of their opportunity to meet directly with their teacher. All students receiving "A's" and over 86 percent of those receiving "C's" indicated that they would be willing to recommend the course to a friend.

Summary

The evaluation of Project Advance Psychology compared the performance of students in Project Advance with that of students taking the same course at Syracuse University at ten points through the course--a pre- and post-test, a midterm, and each of seven required modules.

Secondly, the evaluation study examined Project Advance students' ratings of the course and considered how students who differed in their grades in the course differed in their ratings of the course.

The results indicate that students taking Psychology 205 through Project Advance and students taking the same course at Syracuse University were nearly equal in their performance as measured by their test scores at ten points. Moreover, student performance from school to school across Project Advance was quite consistent.

Overall, student ratings of Project Advance Psychology were overwhelmingly positive. Within that positive range, students more often rated the course "good" than "excellent." This was also true of the student ratings on the Adjective Rating Scale. Across high schools, students were quite consistent in their ratings. However, where shifts occurred, they were negative. Most notably, students found the course to be less exciting, less rewarding, and less stimulating than they had expected it to be. Students who differed in the grades they earned

differed only slightly in their ratings of the course. Both groups found the course to be a positive experience, but "C" students found the readings more difficult and the work load to be heavier than did the "A" students.

AN ASSESSMENT OF THE READABILITY OF TEXT MATERIAL IN PROJECT ADVANCE PSYCHOLOGY

Tess Kosoff

Purpose

Readability formulas have been in wide use over the past fifty years to determine whether a piece of writing is likely to be readable to a particular group of readers. The readability formula is a method measurement that provides quantitative, objective estimates of the difficulty of writing. In contrast to more time consuming methods of assessing readability, such as reader's judgments of results of reading comprehension tests, the formula method predicts the difficulty of a piece of writing without readers first having to read the material.

The purpose of the present study was to use the readability formula method to assess the readability of eight texts designed for use in a college survey course of psychology. Since this college course is also being offered to high school seniors, it was felt that awareness of the reading difficulty of the texts would be helpful to guidance counselors in recommending the course to students.

Procedure

The Dale-Chall Readability Formula was used to determine the readability of each of the following texts:

Psychology, A Behavioral Science, James R. Sutterer, Syracuse University
Learning, James R. Sutterer, Syracuse University
Physiological Psychology, James R. Sutterer, Syracuse University
Memory and Visual Perception, Tibor Palfai and Joseph F. Sturr, Syracuse University
Personality, Mark Sherman, Syracuse University
Abnormal Psychology, Richard J. Morris, Syracuse University
Social Psychology, Clive M. Davis, Syracuse University
Elementary Principles of Behavior, Donald L. Whaley and Richard W. Malott, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1971

Developed in 1948, this formula has been one of the most widely used readability formulas for adult materials and enjoys a reputation of great accuracy. The Dale-Chall Formula correlates .70 with comprehension test scores based on standardized graded passages such as the McCall-Crabbs Standard Test Lessons in Reading.[1] The Dale-Chall Formula is based on two

[1] The Measurement of Readability, George R. Klare.

aspects of style difficulty: vocabulary and sentence length. The formula makes use of the Dale List of 3000 Familiar Words in the identification of difficult (unfamiliar) words in a given sample. According to procedures recommended by Dale and Chall, one hundred word samples are to be selected at random for every ten pages of written material.[2] In the present study, this sampling procedure was used with seven texts. For the longer text, Elementary Principles of Behavior, which consists of approximately 400 pages, fewer than the recommended samples were used. Thus, the nine samples taken from the beginning, middle and ending sections of the text may reduce the accuracy of the estimation of the readability level found for this particular text.

The Dale-Chall Readability Formula is:

$$x_{c_{50}} = .1579_{x_1} + .0496_{x_2} + 3.6365$$

$x_{c_{50}}$ = reading grade score of a pupil who could answer correctly one half of the test questions on a passage

x_1 = Dale Score, or the percentage of words outside the Dale List of 3000 Familiar Words

x_2 = average sentence length

The raw scores are then converted in approximate reading difficulty by grade equivalents using the Dale-Chall Correction Table.

Results

Psychology as a Behavioral Science....13-15 grade (college)
Learning.....13-15 grade (college)
Physiological Psychology.....13-15 grade (college)
Memory and Visual Perception.....11-12 grade
Personality.....16th grade & above (graduate)
Abnormal Psychology.....16th grade & above (graduate)
Social Psychology.....16th grade & above (graduate)
Elementary Principles of Behavior.....11-12 grade

[2] A Formula for Predicting Readability, Edgar Dale and Jeanne S. Chall.

APPENDIX A

TABLE OF COMPUTATIONS--DALE-CHALL READABILITY FORMULA

DALE-CHALL READABILITY FORMULA

Title: Psychology as a Behavioral Science	Page: 3	Page: 13	Page: 21
Author: Sutterer, James R.	From: In	From: In	From: In
Publisher: Syracuse University Date: _____	To: teach	To: to	To: clinical
1. No. of words in sample	100	100	100
2. No. of sentences in sample	7	4	3
3. No. of words not on Dale list	15	41	33
4. Average sentence length (divide 1 by 2)	14.28	25	33.33
5. Dale score (divide 3 by 1, multiply by 100)	15	41	33
6. Multiply average sentence length (4) by .0496	.7083	1.24	1.6517
7. Multiply Dale score (5) by .1579	2.3685	6.4739	5.2107
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 9.52 Analyzed by: T.O.K.

Average corrected grade level: 13-15 Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Learning | Page: 9 | Page: 15 | Page: 80

Author: Sutterer, James R. | From: The | From: although | From: operant

Publisher: Syracuse University Date: _____ | To: . 3 | To: in | To: the

1. No. of words in sample	100	100	100
2. No. of sentences in sample	4	5	5
3. No. of words not on Dale list	32	24	37
4. Average sentence length (divide 1 by 2)	25	20	20
5. Dale score (divide 3 by 1, multiply by 100)	32	24	37
6. Multiply average sentence length (4) by .0496	1.24	.9920	.9920
7. Multiply Dale score (5) by .1579	5.0528	3.7896	5.8423
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 9.61 Analyzed by: T.O.K.

Average corrected grade level: 13-15 Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Physiological Psychology	Page: 5	Page: 17	Page: 25
Author: Sutterer, James R.	From: A	From: In	From: In
Publisher: Syracuse University Date: ____	To: other	To: In	To: et al
1. No. of words in sample	100	100	100
2. No. of sentences in sample	4	4	4
3. No. of words not on Dale list	41	23	24
4. Average sentence length (divide 1 by 2)	25	25	25
5. Dale score (divide 3 by 1, multiply by 100)	41	23	24
6. Multiply average sentence length (4) by .0496	1.24	1.24	1.24
7. Multiply Dale score (5) by .1579	6.4739	3.6317	3.7996
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 9.51

Average corrected grade level: 13-15

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate

DALE-CHALL READABILITY FORMULA

Title: Memory and Visual Perception Page: 5 Page: 23 Page: 41

Author: Sturr, Joseph and Palfai, Tibor From: Since From: The From: The

Publisher: Syracuse Univeristy Date: To: injection To: is To: cells

1. No. of words in sample	100	100	100
2. No. of sentences in sample	4	4	5
3. No. of words not on Dale list	26	21	46
4. Average sentence length (divide 1 by 2)	25	25	20
5. Dale score (divide 3 by 1, multiply by 100)	26	21	46
6. Multiply average sentence length (4) by .0496	1.24	1.24	.9920
7. Multiply Dale score (5) by .1579	4.1054	3.3159	7.2634
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 5 samples: 8.73 Analyzed by: T.O.K.

Average corrected grade level: 11-12 Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Memory and Visual Perception	Page: 11	Page: 31	Page:
Author: Sturr, Joseph and Palfai, Tibor	From: Next	From: Figure	From:
Publisher: Syracuse University Date:	To: Penfield	To: Any	To:
1. No. of words in sample	100	100	
2. No. of sentences in sample	7	4	
3. No. of words not on Dale list	14	20	
4. Average sentence length (divide 1 by 2)	14.286	25	
5. Dale score (divide 3 by 1, multiply by 100)	14	20	
6. Multiply average sentence length (4) by .0496	.7086	1.24	
7. Multiply Dale score (5) by .1579	2.2106	3.1580	
8. Constant to be added: 3.6365	3.6365	3.6365	

Average raw score of 5 samples: 8.73

Average corrected grade level: 11-12

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Personality	Page: 3	Page: 15	Page: 23
Author: Sherman, Mark	From: Tyron's	From: Residues	From: The
Publisher: Syracuse University Date:	To: each	To: love	To: shaping
1. No. of words in sample	100	100	100
2. No. of sentences in sample	3	3	4
3. No. of words not on Dale list	39	29	33
4. Average sentence length (divide 1 by 2)	33.33	33.33	25
5. Dale score (divide 3 by 1, multiply by 100)	39	29	33
6. Multiply average sentence length (4) by .0496	1.6517	1.6517	1.24
7. Multiply Dale score (5) by .1579	6.1581	4.5791	5.2017
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 10.47

Average corrected grade level: 16+

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Abnormal Psychology	Page: 5	Page: 13	Page: 23
Author: Morris, Richard J.	From: Each	From: Halluc-ination	From: in
Publisher: Syracuse University Date: _____	To: May	To: class	To: Zigler
1. No. of words in sample	100	100	100
2. No. of sentences in sample	3	5	2
3. No. of words not on Dale list	31	38	31
4. Average sentence length (divide 1 by 2)	33.33	20	50
5. Dale score (divide 3 by 1, multiply by 100)	31	38	31
6. Multiply average sentence length (4) by .0496	1.6517	.9920	2.48
7. Multiply Dale score (5) by .1579	4.8949	6.0002	4.8959
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 10.608

Average corrected grade level: 16+

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Social Psychology	Page: 9	Page: 13	Page: 31
Author: Davis, Clive	From: In	From: In	From: It
Publisher: Syracuse University Date: ____	To: social	To: By	To: thus
1. No. of words in sample	100	100	100
2. No. of sentences in sample	3	4	5
3. No. of words not on Dale list	44	40	36
4. Average sentence length (divide 1 by 2)	33.33	25	20
5. Dale score (divide 3 by 1, multiply by 100)	44	39	33
6. Multiply average sentence length (4) by .0496	1.6517	1.24	.9920
7. Multiply Dale score (5) by .1579	6.9476	6.1581	5.2107
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 11.04

Average corrected grade level: 16+

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Elementary Principles of Behavior	Page: 11	Page: 25	Page: 39
Author: Whaley and Malott	From: In	From: Again	From: that
Publisher: Prentice-Hall Date:	To: his	To: as	To: he
1. No. of words in sample	100	100	100
2. No. of sentences in sample	3	5	6
3. No. of words not on Dale list	30	28	12
4. Average sentence length (divide 1 by 2)	33.33	20	16.66
5. Dale score (divide 3 by 1, multiply by 100)	30	28	12
6. Multiply average sentence length (4) by .0496	1.6517	.9920	.0823
7. Multiply Dale score (5) by .1579	4.7370	4.4212	1.8948
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 8.2295 Analyzed by: T.O.K.

Average corrected grade level: _____ Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Elementary Principles of Behavior
Author: Whaley and Malott
Publisher: Prentice-Hall Date: _____

	Page: 217	Page: 227	Page: 235
	From: Now	From: After	From: If
	To: the	To: however	To: thoughtful
1. No. of words in sample	100	100	100
2. No. of sentences in sample	6	4	6
3. No. of words not on Dale list	6	15	30
4. Average sentence length (divide 1 by 2)	16.66	25	16.66
5. Dale score (divide 3 by 1, multiply by 100)	6	15	30
6. Multiply average sentence length (4) by .0496	.8263	1.24	.8263
7. Multiply Dale score (5) by .1579	.9474	2.3685	4.7370
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 7.28

Average corrected grade level: _____

Analyzed by: T.O.K.

Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

DALE-CHALL READABILITY FORMULA

Title: Elementary Principles of Behavior	Page: 401	Page: 419	Page: 431
Author: Whaley and Malott	From: The	From: Similarly	From: it
Publisher: Prentice-Hall Date:	To: will	To: quiz	To: then
1. No. of words in sample	100	100	100
2. No. of sentences in sample	6	4	4
3. No. of words not on Dale list	32	21	25
4. Average sentence length (divide 1 by 2)	16.6	25	25
5. Dale score (divide 3 by 1, multiply by 100)	32	21	25
6. Multiply average sentence length (4) by .0496	.8263	1.24	1.24
7. Multiply Dale score (5) by .1579	5.0528	3.3159	3.9474
8. Constant to be added: 3.6365	3.6365	3.6365	3.6365

Average raw score of 3 samples: 8.8439 Analyzed by: T.O.K.

Average corrected grade level: 11-12 Checked by: A.S.K.

Correction Table

Formula Raw Score	Corrected Grade Levels
4.9 and below	4th grade and below
5.0 - 5.9	5th grade to 6th grade
6.0 - 6.9	7th grade to 8th grade
7.0 - 7.9	9th grade to 10th grade
8.0 - 8.9	11th grade to 12th grade
9.0 - 9.9	13th to 15th grade (college)
10.0 and above	16th grade and above (graduate)

APPENDIX B

WORDS NOT ON THE DALE-CHALL LIST

PSYCHOLOGY AS A BEHAVIORAL SCIENCE

Sample I (p. 3) N = 15	Sample II (p. 13) N = 41		Sample III (p. 21) N = 33	
phrases	previous	believeable	addition	clinical
vaguely	example	acceptable	membership	psychologist
phrases	experimental	scientific	division	completes
conditions	employed	community	within	program
phrase	accurate	experiment	Psychological	program
behavior	information	critically	Association	physiological
dismay	phenomenon	favorable	categorize	psychology
students	bystander	factor	psychologists	industrial
absence	apathy	ability	clinical	psychology
necessarily	design	establish	psychologists	Association
obviously	experiment	realistic	experimental	provided
conditions	results	laboratory	psychologists	membership
examples	doubt	model	denotes	categories
inconsistencies	replicated	systematically	individuals'	specialities
vs.	basis	vary	primary	within
	extending	condition	graduate	discipline
	results	observe	specialized	clinical
	essentially	behavioral		
	phenomenon	consequences		
	replicated	contrast		
	procedure			

LEARNING

Sample I N = 32	Sample II (p. 15) N = 24	Sample III N = 37	
observation	although	operant	occur
asthmatic	average	analysis	influenced
attack	weight	behavior	reinforcement
elicited	increase	verbal	control
emotional	remarkable	statement	verbal
situation	incredible	considered	instruction
suggests	social	discriminative	decreases
classical	reinforcement	stimuli	instructions
conditioning	produce	verbal	explicit
involved	weight	instruction	reinforcement
interviewed	data	example	instructions
patients	suggest	occasion	effect
frequently	normally	occurrence	mental
asthmatic	behavior	behaviors	patients
attacks	controlled	whether	instructions
situations	consequences	behavior	appropriate
list	source	specified	reinforcement
identify	reinforcement	verbal	support
situations	unfortunately	instruction	
asthmatic	weight		
attacks	behavior		
occurred	behaviors		
list	influence		
situations	reinforcers		
patient			
experienced			
constriction			
hayfever			
asthmatic			
enabled			
particles			
experienced			

PHYSIOLOGICAL PSYCHOLOGY

Sample I (p. 5) N = 41

special
circuit
designed
defect
type
activity
experiment
sequence
events
spindle
activity
occurred
detected
electronic
circuit
triggered
aversive
stimulation
site
reticular
formation
stimulation
aversive
effect
behavior
preceded
stimulation
spindle
activity
associated
oppressive
behavior
immediate
decline
within
couple
percent
spindle
activity
aggressive
behavior

Sample II (p. 17) N = 23

notion
systematically
portion
visual
cortex
percent
cortex
percent
intact
demonstration
suggested
visual
cortex
equipotential
i.e.
visual
cortex
perform
function
complex
visual
require
cortex

Sample III (p. 25) N = 24

normal
weight
varied
depending
whether
expected
normal
weight
results
obese
individuals
experiment
whether
suggested
normal
weight
individual
governed
internal
cues
obese
individuals
influenced
external
stimuli
et al

MEMORY AND VISUAL PERCEPTION

Sample I (p. 5) N = 26	Sample II (p. 23) N = 21	Sample III (p. 41) N = 46		Sample IB (p. 14) N = 14	Sample IIB N = 20
initial	spectral	thus	information	sobered	suggests
experiments	sensitivity	depth	provide	memory	provided
conducted	relative	perception	unitary	evidence	nm
nature	brightness	depends	binocular	argued	identical
bio-chemical	wavelengths	monocular	vision	alcohol	appearance
recent	control	binocular	stepopsis	interrupted	provided
experiments	reflect	cues	understood	aspect	mixture
pharmacology	stimuli	monocular	actively	storage	audition
professor	quanta	cues	investigated	reestablish	complex
university	reflect	dependent	laboratories	memory	analyzed
avoid	example	experience	example	intoxicated	constituents
isolated	virture	stepopsis	monocular	reestablished	projector
substance	reflected	provides	visual	phenomenon	providing
scotophobin	surfaces	uniquely	disorders	dependent	nm
injection	perception	perceptual	produce		virtually
chemical	visual	experience	suppressional		appropriate
naive	determined	solidness	input		mixture
percentage	quanta	absence	consequently		wavelengths
avoid	reflected	monocular	stepopsis		primaries
although	although	depth	neurophysiological		wavelength
experiment		cues	isolated		
scotophobin		organizes	retinal		
produced		monocular	disparity		
synthetically					
laboratory					
injections					

PERSONALITY

Sample I (p. 3) N = 39

results
supportive
insofar
intelligence
precisely
maze
ability
concerned
impact
environment
previous
nurture
expression
intelligent
behavior
minimized
basis
inherited
potential
exposure
extremely
impoverished
environment
retard
development
intelligent
behavior
thus
categories
events
understood
probably
products
heredity
environment
interaction
variable
impact
span

Sample II N = 29

female
residues
incompletely
resolved
Oedipal
complex
manifest
defiant
attitude
authority
predisposition
reminiscent
recognition
genital
discrepancy
precipitate
Electra
complex
resent
experiences
inferiority
lack
entertaining
fantasies
annihilation
penis
envy
results
heightened

Sample III (p. 23) N = 34

importance
observational
assumed
process
adequately
development
complex
novel
responses
Pavlovian
classical
conditioning
theory
response
CR
repertoire
attached
stimulus
Skinnerian
operant
conditioning
approach
typically
response
concern
consequences
responses
affect
strength
frequently
emitted
exception
operant
procedure

ABNORMAL PSYCHOLOGY

Sample I (p. 5) N = 31

classification
systems
medical
model
assumes
patient's
symptoms
maladaptive
behaviors
underlying
psychological
disorder
neurological
defect
example
patient
unfamiliar
assumed
symptom
basic
underlying
mental
disorder
recent
increasing
clinicians
validity
model
patient's
physical
symptoms

Sample II (p. 13) N = 38

hallucinations
elicited
evidence
delusional
noticeable
symptoms
giggling
inappropriate
meaningless
condition
unchanged
hospitalized
schizophrenic
reaction
dramatic
paranoid
catatonic
hebephrenic
types
disorder
development
characterized
gradual
lessening
emotional
attachments
hobbies
extracurricular
activities
progressive
apathy
withdrawal
interpersonal
relationships
disruption
mental
ability
deteriorated

Sample III N = 31

addition
validity
medical
model
researchers
critical
reliability
classification
system
psychiatric
particularly
determining
clinicians
diagnosis
particular
patient
clinician
opportunity
independent
evaluation
patient
research
indicate
reliability
specific
diagnosis
example
schizophrenic
reaction
paranoid
type

SOCIAL PSYCHOLOGY

Sample I N = 44

addition	belief
demonstrating	social
subtle	pscyhology
pervasive	provide
nature	basic
social	phenomena
influence	psychology
research	human
aspects	behavior
associates	immune
illustrate	influence
approach	social
contemporary	stimuli
social	social
psychology	psychologist
attempt	increasingly
social	aware
behavior	range
obvious	social
result	stimuli
preceding	effects
discussion	social

Sample II (p. 13) N = 40

vicarious	observer
reinforcement	acquires
empathetic	responses
model	model
behaves	manner
experience	observer
consequence	actually
aversive	performed
reinforcing	principle
observer	generalization
assumed	reinforcement
experiences	occurring
intuition	model
empathy	intuited
consequences	observer
encountered	similar
model	previous
result	experience
vicarious	observer
conditioning	experienced

Sample III (p. 31) N = 36

occurred	concluding
discussion	unit
attitudes	focus
programmed	issue
focused	directly
attention	recall
relationship	attitude
attitudes	behavior
overt	infer
behavior	observable
dissonance	internal
theory	process
basically	observable
theory	attitudinal
concerned	behavior
effect	acceptable
behavior	observed
attitudes	behavior

ELEMENTARY PRINCIPLES OF BEHAVIOR

Sample I (p. 11) N=30	Sample II (p. 25) N=28	Sample III N=12	Sample IV N=6	Sample V (p. 227) N=15
apparently	vertical	reinforcement	stupid	discrimination
diverse	axis	instance	Chinese	developed
behavior	ordinate	backsliding	harmful	technique
problems	horizontal	necessary	sort	establish
starvation	axis	extinction	control	imitative
thumbsucking	abscissa	process	contrive	discriminations
mental	ordinate	ninth		consisted
retardation	labeled	eliminated		imitations
effective	cumulative	problem		preceded
behavioral	frequency	miserable		particular
techniques	differs	reported		imitated
consistently	ordinate			S^D
report	labeled			imitative
warrant	frequency			S^D
emphasis	labeling			required
instances	segmentations			
emphasis	abscissas			
actually	identical			
psychologist	cumulative			
behavior	graph			
interview	differs			
theroizing	frequency			
speculating	observed			
observed	frequency			
occurred	observed			
result	preceding			
action	frequency			
self-mutilation	frequencies			
alleviated				
relatively				

ELEMENTARY PRINCIPLES OF BEHAVIOR

Sample VI (p. 235) N = 30	Sample VII (p. 401) N = 31	Sample VIII (p. 419) N = 21	Sample IX (p. 431) N = 25
anticipated	previous	similarly	argued
verbal	interview	laboratory	although
prompt	college	required	extensive
immediately	clinciians	eliminate	organization
reinforced	refer	ambiguity	immoral
anticipating	phobia	detailed	exert
prompts	phobia	style	control
reinforcers	typically	manual	individual
gradually	irrational	sample	argument
stimulus	acute	laboratory	social
control	irrational	provided	advance
developed	aspect	regular	initially
phrases	phobia	consists	criticized
presence	emphasized	quiz	immoral
prompts	situation	brief	Ph.D.
conditioning	individual	opportunity	program
appropriate	reacts	quizzes	adequately
stimulus	normal	assignment	society
control	conditions	quiz	society
verbal	phobias	regular	adequately
behavior	frequently	quiz	depends
developed	clincial		nature
attendant	psychologist		society
common	reactions		society
household	provoking		Ph.D.'s
objects	situations		
increasing	observed		
ease	involve		
doubt	avoidance		
thoughtful	responses		
	type		
	patient		

Recommendations

Since the text materials were found to range in difficulty from eleventh grade to sixteenth grade level and above, high school students who are experiencing difficulty in reading high school texts should not be recommended for this survey course in psychology. Difficulty in reading might be reflected by standardized test scores, school achievement and teacher observations, especially in areas such as English and Social Studies.

Motivation is acknowledged to play an important role in reading comprehension. According to reading research, students comprehend more when they have established a purpose for reading, a set to learn, as well as an interest in the subject. Since psychology is a subject which arouses great general interest, students should be made aware that these text materials in psychology deal with this discipline as a behavioral science, rather than psychology applied to personal needs. This aspect of the course should be made clear to prospective students.

Readability formulas generally deal with only two aspects of written material: the word factor and the sentence factor. Thus concepts, clarity in presenting ideas and relationships, and organization of the material are not considered. It is recommended that teachers increase students' ability to learn from the texts through instruction prior to reading as well as through review after reading. By focusing on new vocabulary and key concepts prior to students' reading of text materials, it has been found that teachers can measurably increase students' understanding.[3]

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[3] Teaching Reading in Content Areas, Harold L. Herber.

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PERCEIVED ATTRIBUTES OF AN INNOVATION-
SYRACUSE UNIVERSITY PROJECT ADVANCE

Robert Holloway

The growing size and number of high school-college articulation programs (Wilbur, 1974) suggest that it would be worthwhile to examine one such educational innovation, namely Syracuse University Project Advance. Whether or not an innovation is adopted depends on at least two things: the characteristics of the adopting agency and the characteristics of the innovation. Since the "adoption performance of one innovation is not necessarily a reliable predictor of adoption performance of another innovation or several other innovations" (Carlson, 1965, p. 53), it is necessary to examine each innovation carefully before predictions of how it will be received can be made. The present chapter describes some of the characteristics of Syracuse University Project Advance that induced certain high schools in New York State to adopt it and later to diffuse it.

It will be helpful to define some of these terms. Innovation in this context was simply defined as "something perceived as new." Adoption was characterized as "the offering of Syracuse University credit-bearing courses in one or more subjects in a high school." Diffusion was "an increase in the number of class sections or the number of additional subjects offered within a high school."

The spread of the course offerings from school to school and within each school provided formative data to verify some factors which may affect adoption and diffusion. The intent of the following observations and remarks was to examine a limited number of characteristics of the innovation as they may have been related to adoption.

Characteristics of the Innovation

The gross categories typically used to describe important perceived characteristics of an innovation have been (after Rogers & Shoemaker, 1971)

1) relative advantage: "better than" in terms of economic, political or social advantage
2) compatibility: consistent with existing social values, organizational structure and perceived needs
3) simplicity: ease of understanding or use
4) trialability: may be experimented with on a limited basis
5) observability: visible to others

It is important to note that these categories were projections of the perceptions of the members of a social system. These perceptions by potential adopters may not necessarily be congruent with such factors as research findings, advocates' viewpoints or real costs. As others have observed, "The prospective adopter is not likely to select the research-based solution solely because it stands on a base of scientific knowledge, especially if something else is less expensive . . . or otherwise attractive" (Brickell, 1967, p. 235).

Relative Advantage. The simplification of this attribute is the adopter's question: "Is this better than the existing way(s) of doing things?" Economic profit is usually the criterion. Public schools are not market-oriented in this sense, as Pincus (1974) pointed out, and are "less likely than the competitive firm to adopt cost reducing innovations." With relatively static budgets, schools are becoming more sensitive to new expenditures. New expenditures in a static budget mean displacement of support for existing activities. Schools have traditionally favored innovations which promote community image. That is, they have wished to show they were "up-to-date," "efficient," "professional," and "responsive" (Pincus, 1974).

The costs to a school which implemented Project Advance averaged between $200 to $400 per teacher per course per initial training. Those courses offered in the high school average $20 to $30 per student per course for the initial outlay for texts, tests, and other materials. However, the real cost to the school was less for two reasons. The training was offered as workshops open to all schools whether or not they planned to or actually offered Project Advance courses and thus qualified for partial reimbursement through state aid. Additionally, the courses were offered as high school courses with students paying tuition to the university for recording and supervising the achievement of college level work. Thus, the materials were purchased as part of the regular school budget, and their cost was also defrayed by state aid. The cost of developing the courses had been borne by the university earlier since the objective had been to improve on-campus courses.

Given this somewhat serendipitous set of circumstances, the schools were able to justify the costs to the community. Transferable college credit for high school seniors met the criterion for "up-to-dateness,"

indicated responsiveness to student needs, and enhanced the professional status of the high school faculty. The elimination of duplication in the curriculum appealed to the criterion of efficiency, and the relatively low initial cost did not impede adoption.

The schools were aware of the continuing in-service work required of teachers (a short workshop each semester on course changes and standards), and recurring cost of materials, such as test forms. These costs were minimal: less than $5 per student per course and less than $75 per teacher per year. These costs were usually subsumed under existing budgets for substitutes, travel, or materials. On several occasions the university underwrote costs when they were not part of a regular budget. This included replacement of materials when major revisions occurred in the on-campus courses. Thus the maintenance costs for continuing the innovation did not impede adoption. This was the strongest statement that could be made since the schools were not profit oriented, and indeed were legally constrained to show no profit.

The relative advantage for the innovation as perceived by the public schools appeared to be its economic optimality: it involved neither profit nor additional cost while potentially improving the image of the school in the community.

Other publics were involved in the decision to offer the courses, and economic considerations beyond the schools came into effect. Tuition was required of those students seeking college credit. This was paid directly to the university and did not involve the public schools. The tuition defrayed the university costs of recording, evaluating, and supervising the achievement of college level work.

The actual source of the tuition was, of course, the parents rather than the students. The relative costs, or advantage, of Syracuse University Project Advance tuition were openly examined by parents. Since other options enabling high school students to obtain college transcript credit were at least as expensive, adoption and implementation appeared to be relatively desirable to parents. For example, three credit hours through Project Advance cost $50. The same three credit hours on the university campus would cost approximately $350. Arrangements with local community colleges averaged about $60 for three hours while public four-year colleges were

charging approximately $70 for the same number of hours. Questions during discussion period at parents' nights at adopting high schools as well as a survey of parent attitudes (Chapman, 1976) indicated economic advantage was not an important factor. Parents were aware that many colleges have a flat tuition rate enabling students to take courses above the minimum load at no additional cost. Further, earning three to nine credits would not appreciably reduce the total time needed to earn a college degree. While not precluding adoption, costs as long term advantage did not translate into savings. Relative advantage for students and parents appeared to depend on factors beyond, or in addition to, economics.

Parents and students felt strongly about the experience of college work. A survey of 170 parents indicated that the "equivalence of the course on- and off-campus was . . . the most important outcome" (Slotnick & Chapman, 1975). Eighty-nine percent of the parents favored using the same evaluation standards on- and off-campus. In contrast, parents indicated that favorable publicity for the local school was one of the least important outcomes. Only 36% of the parents indicated that it was important that "High schools participating in Project Advance are considered innovative by people living in those school districts" (Slotnick & Chapman, 1975). Parents may have perceived the relative advantage of Project Advance and other innovations in this class to be the experience of college work for the student. Bearing this point out, a survey of students who did not transfer their credit, even though they earned respectable grades, revealed that they believed that they could do even better in the colleges in which they enrolled, and the satisfaction of success in a college level course was reward enough in itself.

Other non-economic advantages, such as social approval, self-assessment, status, and self-image, may have served as incentives to adopt. Seventy-one percent of the parents surveyed (Slotnick & Chapman, 1975) believed it was important that the courses provided a student with an indication of ability to do college work. Additionally, 87% of the parents strongly favored Project Advance as an enrichment of high school experience and 70% responded "Important" to the statement "Students completing Project Advance courses are more confident about their ability to do well in college." Thus, the advantages of Project Advance as perceived by parents appeared to relate to improving the students' probability of success in college rather than to economic advantage.

Parents perceived improving the students' potential for academic success in college to be more important than economic savings.

Compatibility. The second category used to describe perceived characteristics of an innovation provided an examination of several relationships. Compatibility includes comparisons of the innovation with existing social values, organizational structure, and perceived needs.

Since the majority of high school graduates in New York State have, in the past, enrolled in college, the earning of college credit per se was compatible with existing social value. Thus, the newness of Project Advance was in the organization and location rather than eventual outcomes, i.e., college credit. This appeared to be self-evident and bore further examination only insofar as it related to particular schools.

The organizational structure of public schools, as with any bureaucracy, favors self-perpetuation (Pincus, 1974). Since students remained in the system and teachers retained their traditional role, the innovation was compatible with the existing structure. Students enrolling in courses off the high school campus or faculty coming onto the campus compete with existing structure. Over 5% of the high school students in New York State graduate at the end of their junior year chronologically. This, in addition to the projected decrease in enrollment, created a need climate that was favorable. The public schools perceived a need for innovations that would retain students in the system.

As an innovation, the Project was perceived as contributing to stabilizing and perpetuating the organization, and thus was compatible with organizational needs and values.

The importance of compatibility in determining adoption was most clearly supported by the differences in the selection of courses. Five courses were available for the 1973-74 academic year: Religion, Drugs, Communications, Psychology, and English.

Though there were at least three schools with teachers qualified to teach the Drugs and Religion courses, no school offered either Drugs or Religion. Of the nine schools, eight offered English, seven Psychology, and two Communications.

With 40 schools offering courses in academic year 1974-75, the same pattern was evident. Thirty-four offered English, 16 Psychology, 2 Music, and 1 Religion. (Music had been added; Communications dropped.) The

predictable difference in compatibility between the high school curricula and Religion and Drugs courses need not be belabored. The difference between English and Psychology was less predictable.

Psychology courses have an inherent advantage over English courses in student interest. However, the organization and curricular compatibility appeared to have been more powerful in determining adoption. Eighty-five percent of the schools offered English in 1974-75 while 40% offered Psychology.

The congruence of the innovation with existing practice increased the likelihood of adoption. Conversely, the less the innovation was perceived as compatible with existing practice, the less likely it was to be adopted.

A separate factor may have influenced this adoption pattern: most colleges have required freshman English while courses such as Psychology have been electives. The students and parents may have perceived higher utility for the English course as opposed to Music or Psychology courses. English was also a requirement in the high school. A more formal study would have been necessary to discriminate among the possible perceptions of English: relative advantage in terms of transferability or compatibility with need and existing structure were equally plausible explanations.

Simplicity. Perceived simplicity of an innovation is positively related to adoption (Petrini, 1966). Conceptually, the earning of college credit through this and similar programs was simple and, since neither students nor teachers were transported, so did the logistics. The arrangements for summer workshops, money collection, and other administrative activities, however, tended to slow adoption. Decision making became complex because of the number of "gatekeepers" (Havelock, 1973) involved. Effort on the part of the Project staff was required to facilitate the decision making.

The adoption of the innovation was a relatively simple process and thus may have increased the potential for adoption.

A separate consideration, the discontinuance of the innovation because of complexity, remains to be examined. The source of concern was the within-course complexity. This involved logistical concerns inherent in an individualized program, difficulty of use (such as excessive teacher time for grading by university standards), and other front line problems. This was of interest, since it made a clear discrimination between perceptions of complexity related to adoption and perceived complexity related to continuance. The time span of

18 months was too short to furnish data on discontinuance. One school participating in the first year dropped out at the request of the Project. A second school proposed discontinuance because of staffing and overcrowding problems the second year.

Trialability. Also described as divisibility, the idea of reducing risk by incremental adoption appeals to reason. No school offered more than three Project Advance courses in 1973-74 or 1974-75. Of the five courses available in the first year, two schools offered only one course, four offered two courses, and three offered three courses. Thus, 66% of the schools offered only one or two courses. The pattern emerged more clearly in the second year. Approximately 67%, or 27 of the 40 schools, offered only one course. Eleven schools, or 27%, offered two, and two schools, 5%, offered three courses. Thus, 95% of the schools offered only one or two courses. Further, the majority of schools in the first year offered only one class of the course(s) actually taught. Two of the larger schools offering only one section clearly had the potential to offer multiple sections of a course. Trialability as a factor was demonstrated by the expansion to four sections in the second year in both schools.

Adopters appeared to prefer to try the innovation on a limited basis before expanding. Further, the innovation possessed the characteristics of divisibility which may have been so perceived by adopters and thus have increased the likelihood of adoption.

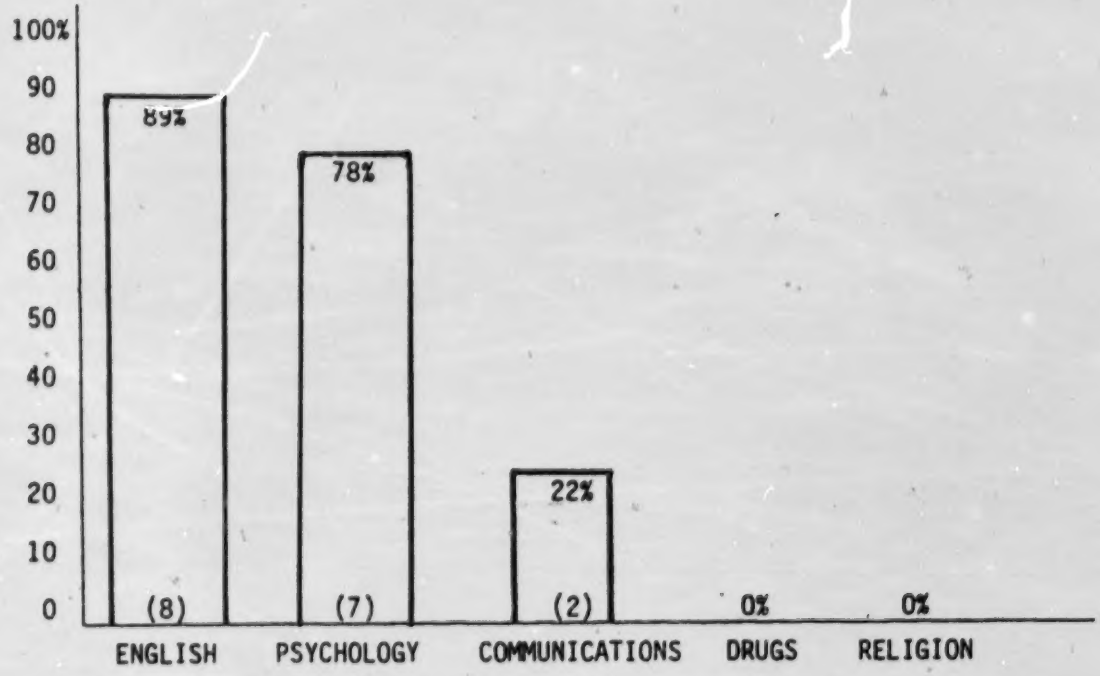
Observability is the visibility or demonstrability of an innovation. The examination of this characteristic has centered on material and technical innovation rather than ideas or process. The literature indicates that the observability of the innovation is positively related to its adoption rate (Rogers & Shoemaker, 1971).

The observability of the Project did not appear to be positive. Its redeemable feature was that it was easy to describe in conceptual terms. An earlier term used to describe this characteristic was "communicability" (Rogers, 1962). Given this dimension (communicability), the Project may have benefited from the conceptual ease with which it could be described to potential adopters. The most important perceived characteristic may have been the college credit structure.

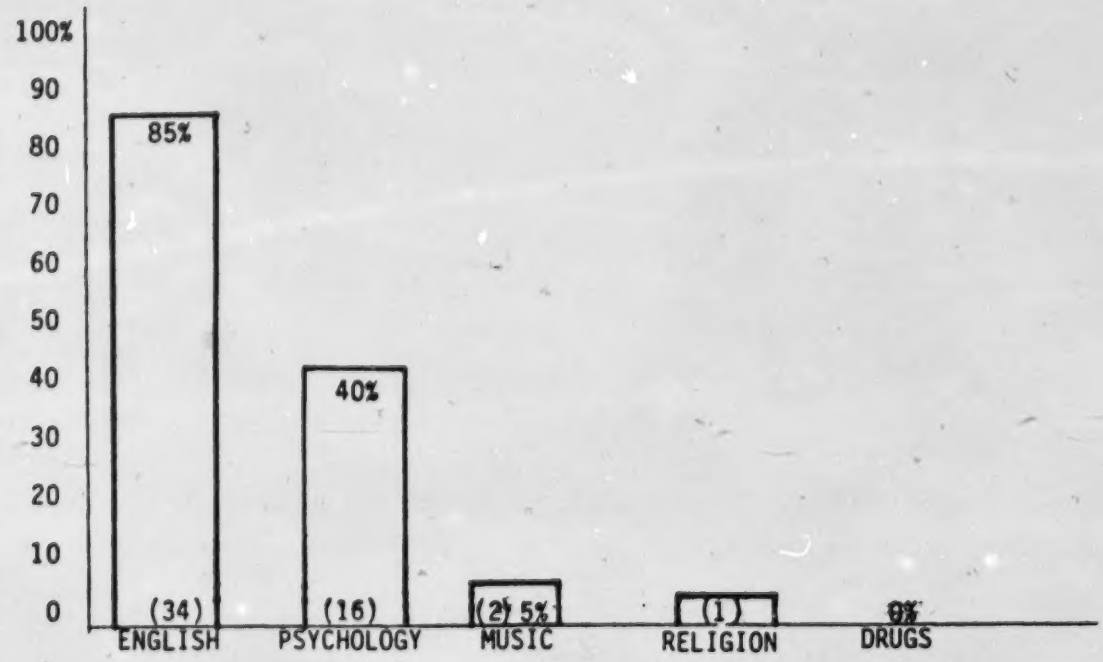
Brief descriptions through the media, mailings, and presentations at regional meetings appeared to relate to adoption. One mailing and one regional

COMPATIBILITY

PERCENT OF SYRACUSE UNIVERSITY PROJECT ADVANCE COURSES OFFERED IN SCHOOLS (N = 9), ACADEMIC YEAR 1973-74



SYRACUSE UNIVERSITY PROJECT ADVANCE COURSES OFFERED IN SCHOOLS (N = 40), ACADEMIC YEAR 1974-75



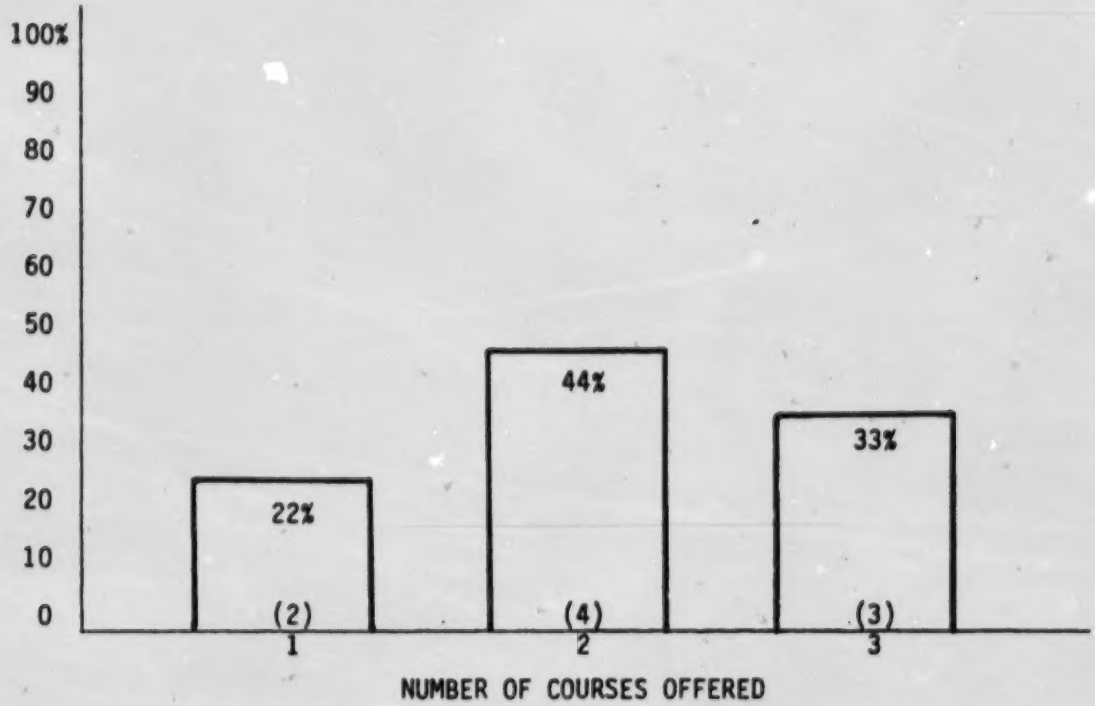
meeting on Long Island elicited considerable response with thirteen schools adopting.

The observability of the innovation may better be described as communicability. The compatibility of the concept may affect communicability.

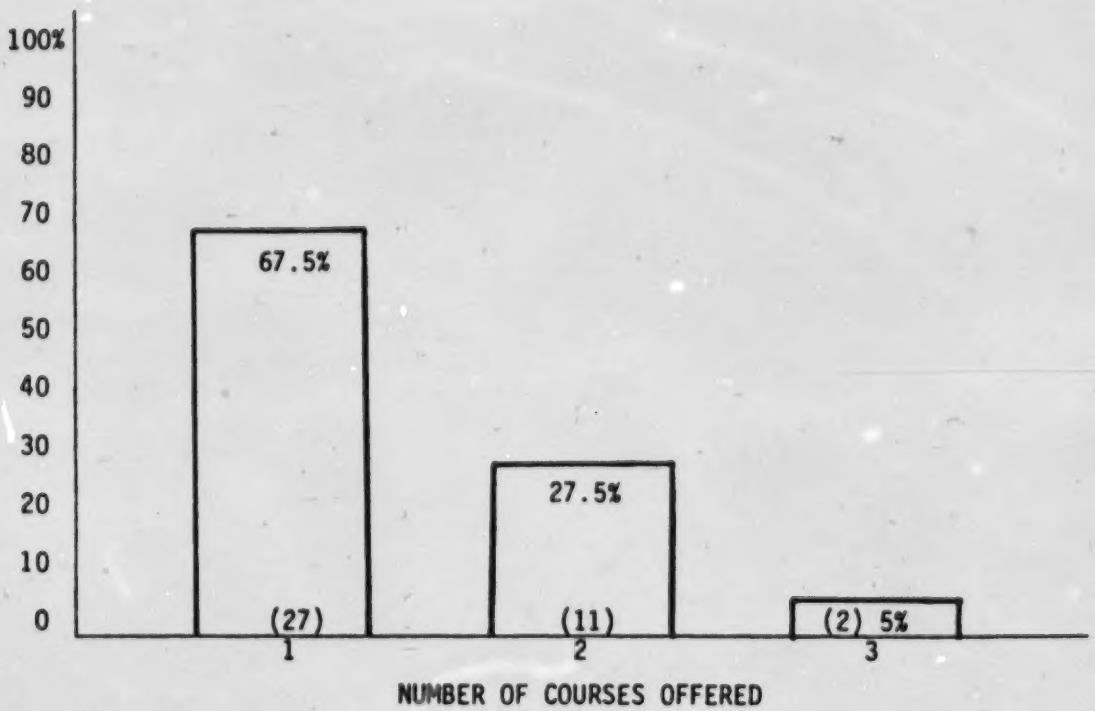
Summary

This innovation (Project Advance) did not appear to possess all the Rogers and Shoemaker characteristics in an equal degree. The low inter-relationships among the five attributes (Kivlin, 1960) indicates that uniformity is not necessary to maximize the potential for adoption. The nature of the innovation lent itself to some attributes, such as trialability, but not to others, such as observability.

SCHOOLS (N = 9) BY NUMBER OF SYRACUSE UNIVERSITY PROJECT ADVANCE COURSES OFFERED, ACADEMIC YEAR 1973-74



SCHOOLS (N = 40) BY NUMBER OF SYRACUSE UNIVERSITY PROJECT ADVANCE COURSES OFFERED, ACADEMIC YEAR 1974-75



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APPENDIX

DESCRIPTIONS OF PROJECT ADVANCE COURSES OFFERED DURING 1974-75 AND 1975-76

COURSE DESCRIPTION FOR SELF-PACED CALCULUS

Self-Paced Calculus is an introductory course in calculus and analytic geometry now being offered to students at Syracuse University who expect to be engineers or mathematics and science majors. Developed jointly by the Department of Mathematics and the Center for Instructional Development, Self-Paced Calculus is designed to allow for different learning speeds and yet permit students to achieve a high level mastery of the content. It is now in its second year of testing and evaluation on campus. The course is a full year offering in which a student may earn up to six credits.

Course Design

The goal of Self-Paced Calculus is to permit students to master the material covered in an introductory college calculus course at a pace most comfortable to them. The subject matter has been divided into units (or blocks of material) which typically take about one week to cover and learn thoroughly. The student uses a standard calculus textbook and a set of detailed study guides prepared in coordination with the text to learn the material in each unit. Regularly scheduled tutorial periods are also available for individual help as needed. Problem solving sessions are schedules in a supplementary role and a series of programed booklets are employed in two units.

For each unit a series of parallel tests have been prepared. When the student feels that he or she has mastered the material in a unit he may request a test for that particular unit. If the test is passed at a prespecified level of mastery, the student may begin to prepare for the next units. If the test is not passed the student is given tutorial help or a remedial assignment and must then take another version of the test for that same unit. Again, a pass is required before proceeding to the next unit. Unit tests may be taken as often as needed with no grade penalty for not passing. Tests for all units are available from the beginning of the course so that any students who have prior preparation in calculus may receive credit by passing the appropriate unit tests.

In order to earn one academic credit four units must be passed successfully; eight units passed earns 2 credits, twelve units passed earns 3 credits, and so on. Thus, the speed at which the student progresses through the course and the number of credits he or she earns depends on how rapidly the material in each of the units can be mastered.

Instructional Materials

A standard calculus text, Goodman--Analytic Geometry and Calculus, a set of corresponding study guides and a brief student manual outlining course procedures are used by all students. Each student should have access to the supplementary text, Greenspan and Benney--Calculus, An Introduction to Applied Mathematics. Each school offering Self-Paced Calculus will also use copies of the Syracuse University tests prepared for each unit and copies of five programmed booklets dealing with derivatives and their application.

SYRACUSE UNIVERSITY
PROJECT ADVANCE
12/74

Course Description

for

Sociology

(Syracuse University Project Advance)

Sociology 201 is the introductory sociology course at Syracuse University. Drs. Mark J. Abramson and Louise Solomon, in conjunction with other members of the Sociology Department faculty and the Center for Instructional Development at the University, have engaged in the development of the course over the last three years as part of a major effort to provide an alternative and, hopefully, better method of instruction.

The semester course is divided into four units (the core), with readings and required assignments associated with each. Students who successfully complete the four units will receive three credits in Sociology 201.

COURSE SEQUENCE

The course is divided into four units of varying length.

I	II	III	IV
35% Culture and Socialization	15% Child Rearing Survey (HRAF)	35% Social Organization	15% Population Projection

COURSE CONTENT

Unit I--Culture and Socialization

This unit deals with the variability of human culture, focusing upon the inter-generational transmission of culture through the socialization process.

Required Readings are:
M. Mead, Sex and Temperament. (An analysis of three primitive societies and the different ways sex roles are learned in each of them.)
F. Elkin and G. Handel, The Child and Society. (An examination of different theories of socialization, and of different sub-group practices in the United States.)

Requirements

You have the choice of completing one of three projects:
1) Essay: Do subcultures exist in the United States? Develop criteria for sub-culture, apply to elderly, the poor, or other identifiable group in the United States.
2) Observe youngsters in neighborhood park or school playground. Analyze differences in play behavior of boys and girls.
3) Analyze differences in adolescent values or "youth culture" between the 1950's and 1970's as expressed by differences in popular music.

Unit II--Child Rearing Survey

You will select any type of socialization or child rearing practice for cross-cultural analysis. (Examples could include such factors as severity of parental discipline or the existence of initiation ceremonies at puberty.) The selected practice will then be examined in relation to either characteristics of familial or social organization (e.g., extended families or type of social classes).

Data will be drawn from R. Textor, Cross Cultural Summary (an atlas presenting coded data on all known societies). You will classify the included societies and then compute an association between the selected variables using programmed instruction booklets. Your paper will discuss the theories that led them to expect certain relationships and report their procedures and findings.

Unit II--Social Organization

Unit Three deals with the nature of contemporary social organization and the change process by which it has developed. More specifically, contemporary social organization will be examined in terms of three processes: industrialization-urbanization, bureaucratization, and demographic transition. The core readings emphasize traditionally important sociological theories of these processes. Thus, in Unit Three, you will be introduced to some of the classical theories which have shaped and influenced contemporary sociological thought. The core readings are:

G. Simpson, Durkheim. (Chapters 3 and 4)
S. Miller, Weber. (Chapters 1, 2, 3, 4, and 6)
D. Wrong, Population and Society. (All)

All students must take an examination on Unit III. The examination contains both multiple choice and essay questions, but you may individually emphasize either type of question.

Unit IV--Population Projection

Your task is to project the population of Guatemala in the year 2000. Various "goals" are set involving the education of young people and rates of overall population growth. To attain these goals, students will modify the country's policies with regard to family planning, birth control and education.

Students will send their policies to Syracuse where they will be used to simulate growth patterns on the PDP-10. Output will be returned to students who will evaluate the effects of their own policies in relation ot those of others in attaining the stated goals.

Course Design

This course presents the basic theories, concepts and methods of Sociology in a format which permits you to select from among alternative projects to satisfy course requirements. You will, therefore, be able to pursue topics of personal interest.

Grading

Your final grade will be determined by your grades in each of the four units. There will be no final examination. Each unit is weighted but, students whose work improves in quality during the semester will receive a final grade which gives added weight to the later units.

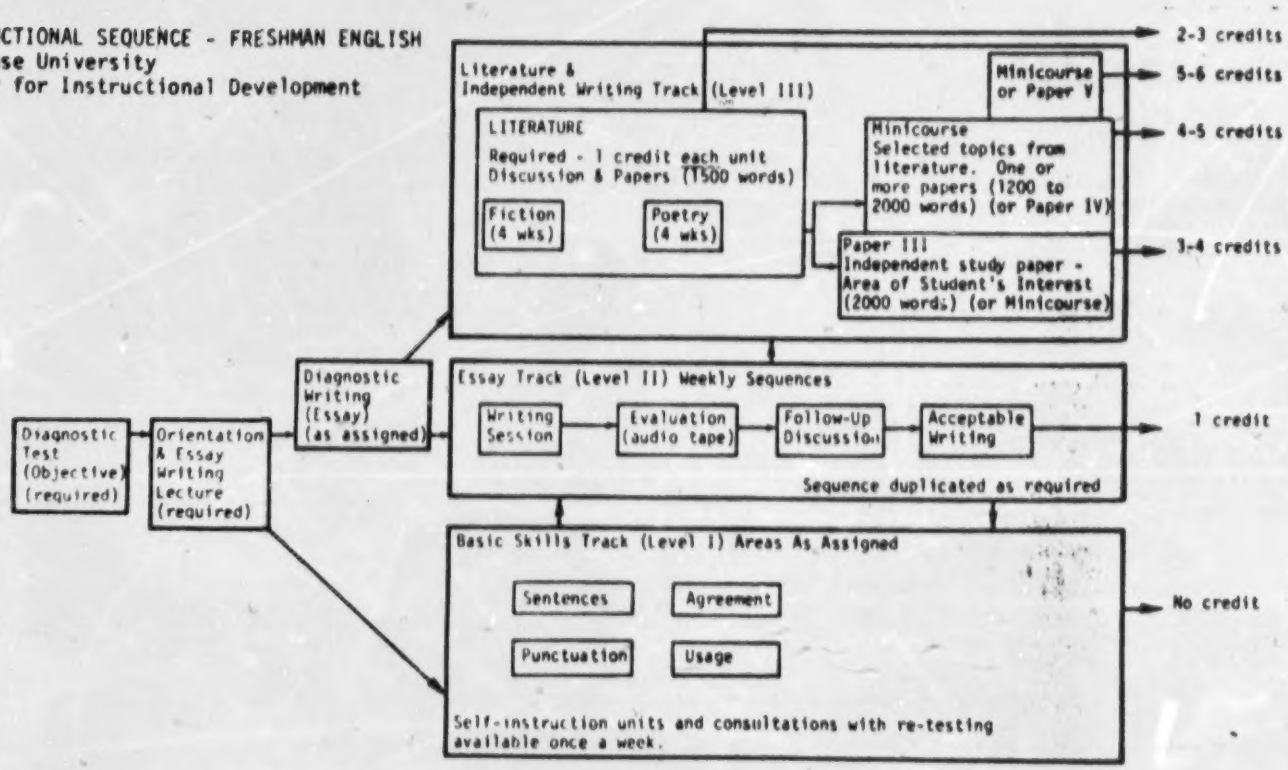
Level III: Literature and Independent Writing Track (2-6 credits)

This track consists of two required formal literature units (Literature-Fiction and Literature-Poetry) plus a selection of optional minicourses and independent study units, each of which requires you to write a paper. You will be awarded credit in the fiction and poetry units when your assigned papers demonstrate your ability to identify the formal elements of the short story and the poetry being considered and to relate them to a deepened and widened response in your own reading experience. Each of the units includes several weeks of classes and conferences with the instructor, and requires one or more acceptable papers, totaling 1500 words. Tests and quizzes are at the option of the instructor.

Independent study is one of two optional units in the course and offers you one credit for each acceptably written paper (up to two). It provides you with an opportunity to investigate and write a paper on a topic that you select yourself with the guidance of your instructor. The independent study unit is available to Level III students only, although you may work on a project at the same time you are enrolled in either one of the two literature units or in a minicourse. You may complete a maximum of two independent study projects, each of which will be graded separately, for a maximum of two credits. You may not, of course, earn more than six credits for the entire course.

In order to receive credit for your independent study project, you must write a 2,000-word paper that is judged satisfactory by an instructor in this course who is familiar with your writing capabilities.

Minicourses allow you to select special areas of literature for concentrated study. You will earn one credit for a minicourse when your completed assignments, test results, and class participation meet the objectives and criteria set forth by the instructor. Your written work, of course, must demonstrate continued mastery of the writing skills required for credit in Level II.



Based on diagnostic tests, students are placed in one of three instructional levels. Level I students are assigned to specific remedial areas according to need and may move up to Level II as soon as they can pass the criteria tests. Level II requires two passing papers before a student may move to Level III. In Level III students are required to take two four-week segments on Fiction and Poetry and may select from a series of minicourses or write a paper from an area of interest for additional credit. The required segments are repeated throughout the semester for the convenience of students moving into Level III during the year.

Course Description for

ENGLISH

Syracuse University PROJECT ADVANCE

The English Department at Syracuse University, in conjunction with the University's Center for Instructional Development, has engaged in an extensive redesign of the freshman English program. The course has been taught on campus for the past three years and, recently, has been successfully field tested in selected high schools in New York State. The course is designed to meet specific individual needs while permitting the student to complete his entire college freshman English requirement. The information that follows is intended to give students, teachers, parents, guidance staff, and school administrators a general preview of the course. Give careful attention to requirements at the various levels.

Objectives: Upon successful completion of this course, you will be able to write a paper that, in the judgment of your instructor, demonstrates competency in writing and in understanding specified formal elements of literature.

The course has been designed, first, to evaluate your grammatical and composition skills in order to place you in the correct track according to your present writing ability and, second, to move you as rapidly as possible up to and through the literature and independent writing units.

The course is divided into three levels or tracks. The diagnostic test which you take during your first class session helps to determine your level assignment in this freshman English course. You will be advised of that assignment as soon as test results are available. Briefly, the three levels are as follows:

Level I: Basic Skills Track (no credit)

This track consists of a combination of independent learning units and consultations designed to correct your specific writing errors within four general skill areas: sentences, punctuation, agreement, and usage. You will be assigned to one or more of these units according to your own deficiencies. Your work at this level will consist of independent study assignments combined with consultation sessions carefully coordinated with your needs. Tests will be available on a regular basis to allow you to prove your mastery of the basic skills and to move up to Level II as soon as possible.

Your success in Level I and your success at the higher levels of this course depend on the amount of effort you are willing to put forth. If you are assigned to Level I, you should almost certainly proceed to Level II before the middle of the semester. However, there is ample opportunity for you, with concentrated effort, to move up within the first few weeks.

Level II: Essay Writing Track (1 credit)

This track combines writing classes and assignments to help you achieve the level of writing proficiency required for your work at Level III. Regularly repeated evaluation will permit you to move to Level III as soon as you demonstrate competency in composition skills. You will earn one credit by successfully completing Level II. With your instructor's permission, you may take one minicourse for one additional credit while you are working at this level. This credit will not be recorded, however, until you have successfully completed the essay unit and the required literature units. While some students may take longer than others to reach an acceptable level of writing ability, you should be able to leave Level II and move to Level III in a relatively short time if you pay close attention to your instructor's critical comments and work toward eliminating your writing deficiencies. His suggestions will prove most valuable to you if you regard them as an aid in identifying the composition skills you need to correct in order to achieve an acceptable level of writing.

Course Description

for

PSYCHOLOGY

(Syracuse University Project Advance)

Psychology 205 is the introductory psychology course at Syracuse University. Dr. James R. Sutterer, Associate Professor of Psychology, in conjunction with other members of the Psychology Department faculty and the Center for Instructional Development at the University, has engaged in the development of the course over the last three years as part of a major effort to provide an alternative and, hopefully, better method of instruction.

The course is designed as a one-semester offering in which you may earn three credit hours. The course has been taught on campus and in seventeen high schools in New York State. The course content has been selected to cover some of the basic areas of psychological study, areas which will be a foundation on which you may wish to build later by taking other offerings in psychology. There are also options which enable you to go into some depth in those areas which are of interest to you.

Course Content: The scientific method of studying behavior and how the method works in practice make up the major thrust of the course. The modules used in the current course are indicated in the flow chart. A description of the second module may be representative of the content of the course.

> The purpose of this module is to provide you with an understanding of how experimental psychologists have investigated learning phenomena. This module is in two parts: the text portion and the programmed portion. After having read the text and the sequences, you should be able to answer the questions on this module in your study guide.
>
> Upon completion of the module, you should be able to 1) define learning and related terms; 2) discuss learning as an intervening variable and as an adaptive process; 3) describe classical (Pavlovian) conditioning and its role in the development of attachment between a mother and her offspring, phobias, and psychosomatic disorders; 4) describe operant conditioning in terms of defined concepts such as operant level, reinforcement, and the empirical law of effect; and 5) discuss the role of attention as a reinforcer.
>
> The study of learning will introduce you to the concept of the scientific study of learning itself in addition to relating "learning" to other topics in psychology, such as personality. Examples of experimental procedures which use empirically based learning phenomena to investigate other research questions, such memory, will be used to establish these relationships.
>
> As in each required module, you will be tested on the Learning module by an objective (multiple choice) exam given in class. If you do not pass the test, there is no grade penalty and you will be able to take make-up exams when you feel ready. You should, however, ask for help from a proctor or instructor if you believe that to be more beneficial than re-reading the material. The make-up exams will be administered by a proctor or instructor in a tutorial situation, and as with the in-class exam, there will be no grade penalty for failure.

Course Design: The course material is divided into modules which cover specific topics. In contrast to traditional courses which use one textbook, the modules in this course comprise a variety of materials which have been selected from several sources. You may move through these materials, from start to finish, at your own pace with a minimal amount of work required by certain deadlines. You will not be held back by other students or forced to go ahead before you are ready to the degree this fits with deadlines established by your instructor. Your final grade in the course will be determined by the amount of work you successfully complete. In most courses, your final grade is determined by averaging your level of performance on a number of tests or papers during the semester. However, in this course you are expected to learn small units of material until you can perform "A" work. Your final grade will be determined by how

many units you complete at the mastery level during the semester.

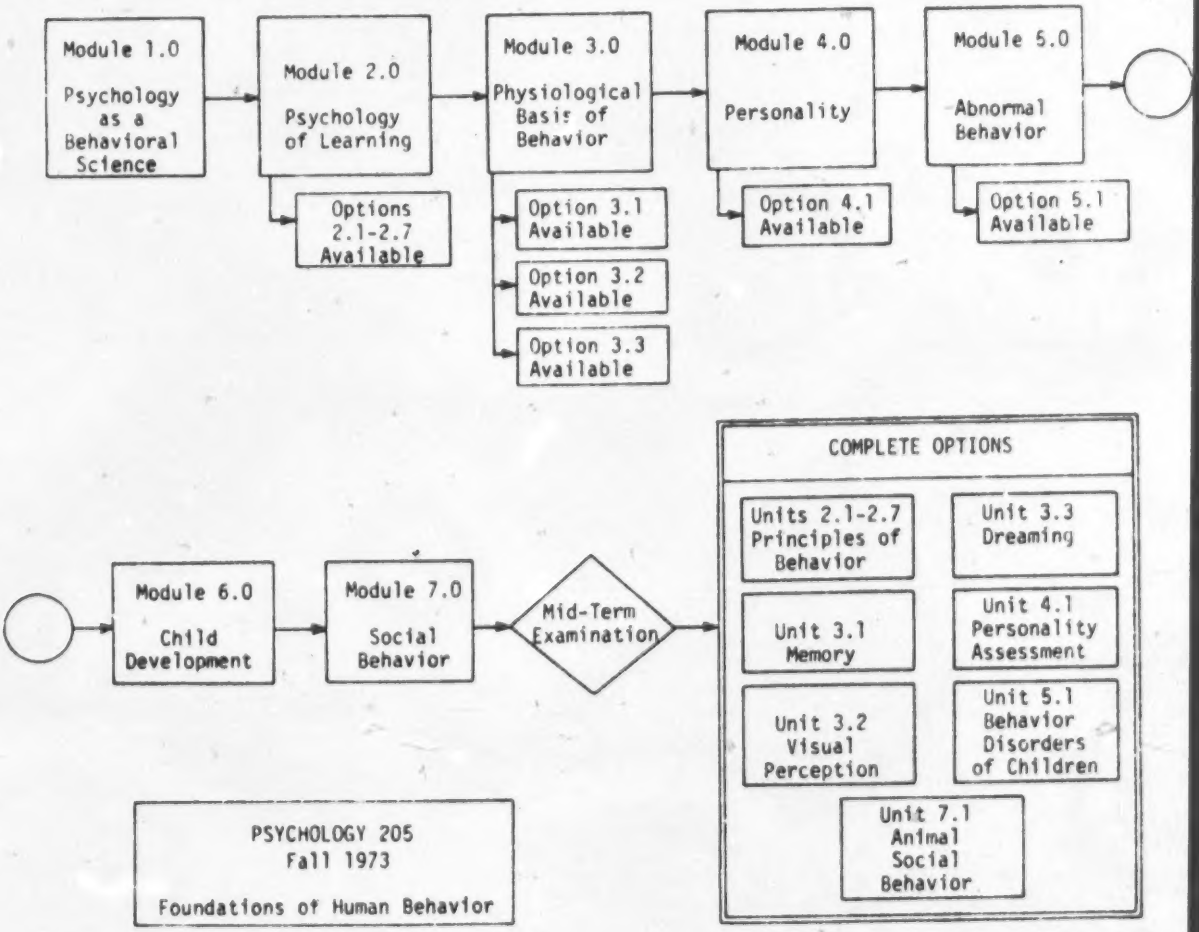
You should be able to complete the basic modules during the first half of the semester. You may take longer if you re-take exams several times. Failure to pass a test on the first or subsequent tries will not be held against you. In determining your grade, only those tests which you have successfully completed, no matter how many attempts you made, will count toward the final grade. If you were to complete every module available and make a perfect score on the mid-term examination, you would accumulate approximately 450 points. From this total, the following grade requirements have been established.

A.....300 points or more
B.....250 points
C.....200 points
D.....150 points*
F.....less than 150* points

* If you earn less than a "C", you may ask your instructor to drop you from the University roster since such grades are not transferable.

The information and concepts on which the tests are based are included in media and books used in the course. Your instructor will provide lectures, demonstrations, and discussion opportunities for you and will help you review materials with which you have difficulty.

The following flow chart indicates the sequence of modules and the options available in 1974-75. There will be minor modifications for the 1976-77 academic year.



Course Description for

Human Values

Syracuse University PROJECT ADVANCE

Human Values is the Introduction to the Study of Religion course now being offered to over 400 students each semester on the Syracuse University campus. This course, developed jointly by the Department of Religion and the Center for Instructional Development, has been field tested for the past three years and represents a major departure from traditional introductory religion courses. Instead of comparing specific religions (e.g., Catholicism, Judaism, Buddhism), the course provides the student with a broad perception of religion as a field of study. The student, moreover, is offered a series of options which allows him to select the subject matter of greatest interest to him.

The school district may offer Human Values as a three-credit course or as a three-to-six-credit course. At the same time, the participating high school teacher may select (within certain guidelines) the specific options that he will teach in his particular high school section.

Course Content and Design

Although the design of the course may vary from school to school, certain elements will be consistent. All students are required to complete a short, two-to-three-week introductory unit which combines independent learning assignments (programed booklets) and seminars. The topics covered include the development of a working definition of the term religion (a definition that will be used in the course) and both a discussion of religion as a field of study and an examination of the criteria for using specific data in this study. Students are required to pass a criterion test before moving out of this unit.

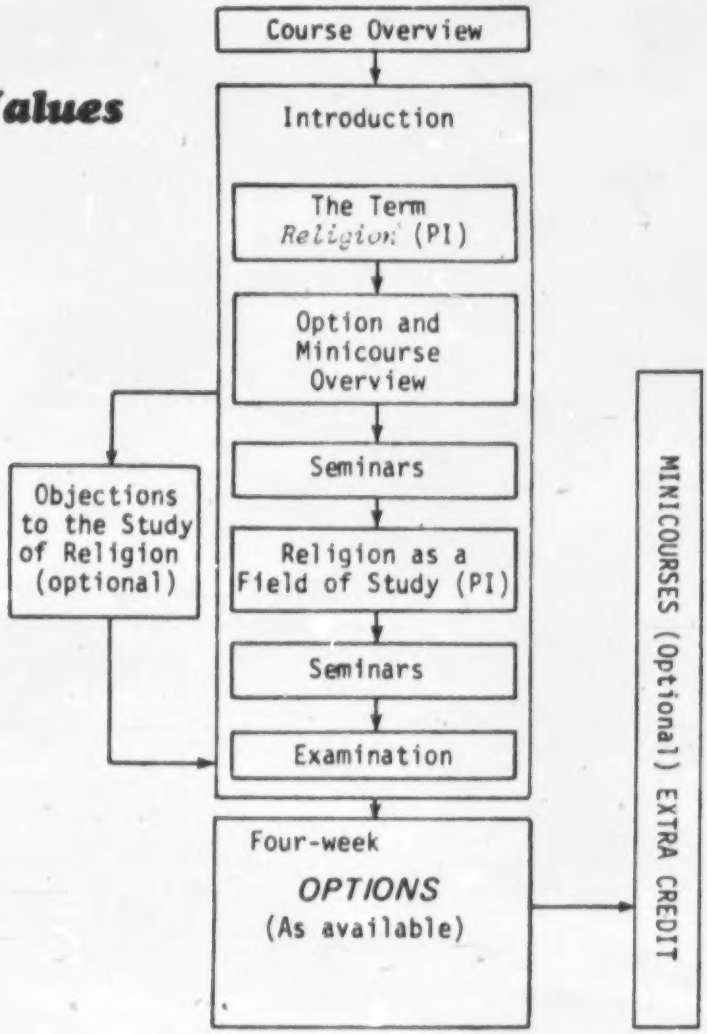
The remaining portion of the course is divided into three broad areas--Forms of Religious Expression (the ways in which people attempt to communicate their religious experiences), Forms of Religious Issues (the questions and concerns that grow out of these experiences), and Methodology or the methods that can be used to investigate and interpret religious data. Students are required to study at least one of the options available under each of these categories (see diagram).

While as many as five options are available in a category, the cooperating teacher may limit his students' choice to those options which reflect his own content area, strengths, and interests. Some options rely heavily on class discussion and individual conferences with the students; others emphasize independent study.

Instructional Manuals

A combined student manual and book of readings, containing the two programed booklets and essays on all the options, is required of all students. Additional books and audio tapes the student will need depend upon the particular combination of options the teacher wishes to offer.

Human Values



OPTIONS

Three options are required, one from each area.
Each additional option is worth one additional credit.

Area I Forms of Religious Expression	Area II Forms of Religious Issues	Area III Methodologies
Myth	Paths of Salvation	Historical
Belief	Death and Eschatology	Psychological
Ritual	Evil and Suffering	Philosophical
Sacred Text	Sacred and Secular	Comparative/ Structural
Community Structure	God and Reason	Sociological
	Religious Experience of the Oppressed	

LIST OF PROJECT ADVANCE HIGH SCHOOLS: 1974-75

Auburn High School
Auburn, New York

C.W. Baker High School
Baldwinsville, New York

Bishop Grimes High School
East Syracuse, New York

Camden High School
Camden, New York

Carle Place High School
Carle Place, New York

Cazenovia High School
Cazenovia, New York

Paul V. Moore High School
Central Square, New York

Central Technical High School
Syracuse, New York

Cicero High School,
Cicero, New York

Clinton High School
Clinton, New York

Corcoran High School
Syracuse, New York

East Syracuse-Minoa High School
East Syracuse, New York

Fayetteville-Manlius High School
Manlius, New York

Glens Falls High School
Glens Falls, New York

Hauppauge High School
Hauppauge, New York

Henninger High School
Syracuse, New York

Herricks High School
New Hyde Park, New York

Jamesville-Dewitt High School
Dewitt, New York

Jericho High School
Jericho, New York

Lafayette High School
Lafayette, New York

Lewiston-Porter High School
Youngstown, New York

Liverpool High School
Liverpool, New York

Manhasset High School
Manhasset, New York

Maryvale High School
Cheektowaga, New York

Moravia High School
Moravia, New York

North Syracuse High School
North Syracuse, New York

Norwich High School
Norwich, New York

Nottingham High School
Syracuse, New York

Oxford High School
Oxford, New York

Roosevelt High School
Roosevelt, New York

Schoharie High School
Schoharie, New York

Shenendehowa High School
Elnora, New York

Solvay High School
Solvay, New York

Wantagh High School
Wantagh, New York

The Wheatley School
Old Westbury, New York

Weedsport High School
Weedsport, New York

LIST OF PROJECT ADVANCE HIGH SCHOOLS: 1974-75

West Genesee High School
Camillus, New York

Westhill High School
Syracuse, New York

Xaverian High School
Brooklyn, New York